According to this paper, the ultimate purpose of graduate and postgraduate education is to design programs to promote improvement in the quality of services that are provided in a variety of different contexts and systems—health and human services, business and industry, government and public service, and education and training. Nova Southeastern University (NSU) has been a pioneer in alternative distance education since 1972. This paper discusses the use of technology in doctoral programs, modernization as a prelude to proactive evolution from a university to a "communiversity," and then a collaborative "globalversity." It postulates that sustaining learning communities will occur at two levels, students and alumni, and that the participants will soon take this effort globally. Many of the alumni of NSU are online through the Internet and sharing communications and problem solving with current and former NSU students. Four appendixes, which make up most of the document, contain the following: information on NSU curricula in child and youth studies; seminars and practicums; creating and sustaining learning community memos; and materials developed by Alan Algee for developing, implementing, and evaluation of a model for teaching intercultural competency through the content areas at Faith School of Theology. Contains 38 references. (KC)
CREATING AND SUSTAINING LEARNING COMMUNITIES

by

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PRACTICUM REPORT EVALUATOR, &
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The ultimate purpose of graduate and postgraduate education is to design programs to promote improvement in the quality of services that are provided in a variety of different contexts and systems -- health and human services, business and industry, government and public service, and education and training. To achieve that ultimate purpose, professional educators engage in basic and applied research, analyze and synthesize vast quantities of information, and create conceptual frameworks and action plans for the preparation of leaders for the above-mentioned contexts.

A High Performance Learner and Leader (HPLL) in the 1990s needs better competencies and newer skills than a manager needed during the expansion era of the 1950s and 1960s or for the modernization era of the 1970s and early 1980s. Modernizing education and training in the 1970s and 1980s was difficult during a period of major advances in science and technology that impacted on workplace and workforce needs. The transition from an industrial era to an early technical era was complex and fast. However, the transition from the early technical era to the advanced technical era of the late 1990s and 21st century will be even more complex and occur at an even faster rate. What then should be the vision and action plan to yield world class High Performance Learners and Leaders?

Nova Southeastern University (NSU) has been a pioneer in alternative distance education. NSU began its pioneering effort in alternative distance education in 1972 by grouping adult learners into clusters and having a national faculty fly to sites throughout the United States and elsewhere. NSU had the first graduate education programs in the U.S. to be delivered via computer and telephone into students' homes through bulletin boards and electronic mail in 1983. NSU adapted the electronic mail technology for concurrent real-time interaction of faculty and students in an electronic classroom (ecr) in 1985. This paper discusses the use of technology in doctoral programs, modernization as a prelude to proactive evolution from a university to a communiversity and then a collaborative globalversity.

A NEW WAY OF LIFE

...this is about our way of life. An historical analog would be the Industrial Revolution, but compressed into 15 years - not played out over a century. Hang on - this will quite a ride.

ABSTRACT

LEARNING COMMUNITIES

NOVA SOUTHEASTERN UNIVERSITY

Child and Youth Studies

PROGRAMS FOR HIGHER EDUCATION

MAJOR APPLIED RESEARCH PROJECTS

Creating Learning Communities

Sustaining Learning Communities

CONCLUSIONS

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APPENDIXES

A. Child and Youth Studies

B. Seminars and Practicums

C. Creating and Sustaining Learning Community Memos

D. Materials Developed by Alan Algee

* * * * * * * * * *

FIVE PRINCIPLES OF THE STRUCTURAL REVOLUTION

First, it takes a personal commitment on the part of the CEO. This is not a job you can delegate.

Second, it takes a willingness to confront and expel the people and the organizations that are throwing up roadblocks to the changes you consider critical.

Third, you need to set high expectations. You can’t have too many goals. One or two are best.

Fourth, it’s critical to measure the progress against goals - relentlessly and continuously.

And finally, there must be a willingness on the part of the change agent to hold people accountable for results.

Louis V. Gester, Jr., National Governors’ Association

July 30, 1995
LEARNING COMMUNITIES (LC)

"Learning Communities" have existed since Adam and Eve. At one time or another, we have been a part of LC - family, church, boy or girl scouts, stamp collecting, or a special interest group. The "ENDS" of a LC are to raise our level of awareness and understanding through collaboration, to transform conceptual frameworks and/or acquire specific information. The "MEANS" for achieving these goals individually or collectively are undergoing major change through contemporary communications technology. This paper briefly traces LC evolution to help anticipate changes and implications for organizational development (OD) and clarify major issues for human resources development (HRD) systems.

One form of LC emerged as a strategy in strategic thinking in the 1970s and evolved through a broad range of experiences in schools, colleges, universities, community agencies, and two doctoral programs in the 1980s. As know-how about strategic planning evolved in the 1970s, research indicated that teams of humans should project historical data into the future and discuss conditions as a prelude to specifying assumptions for goals and objectives to which resources would be allocated. The Council of Independent Colleges created a series of manuals to assist institutions in specifying and using assumptions in strategic planning in the 1970s. An Academy for Education Development project helped institutions in specifying assumptions about future conditions; the project involved three categories of 60 colleges and universities in 1975-77. The University of Wisconsin System had an advanced planning system with categories for assumptions about future conditions and categories for goals in the mid 1970s. These projects all represented LC that attempted to anticipate the future, identify issues and co-create visions and scenarios that were transformed into multi-year action plans.

The Snowmass Institutes for Strategic Planning brought together educational leaders for one week of analysis of variables projected into the future. Participants analyzed the variables based on type of institution and co-created scenarios of the future. Research reported about the institutes included learning styles, how participants prefer to intake and process data, and planning styles, how members of LC use the information to co-create visions (ED 298 977).

Learning styles and planning preferences were used in seminars to group doctoral students to accomplish learning objectives such as vision co-creation and action plan development. Collaborative learning online within seminars began in 1991 (Groff, 1994). That research was applied to create and sustain LC via computer based online learning at the dissertation level for major applied research projects.
COMPUTER BASED ONLINE LEARNING

CONTEMPORARY           NEXT GENERATION

POLICY
MISSION PRIORITIES
STRATEGIC
ALLIANCES
CURRICULUM
STUDENT
LEARNING
OUTCOMES
TECHNOLOGY
HUMAN RESOURCES
DEVELOPMENT
FISCAL RESOURCES

Current Paradigm

Teacher

Fixed Schedule

Campus Based

Student

Experience

Knowledge

Technology-Based Paradigm

Teacher

Anytime

Anywhere

Anyplace

On Demand

Student

Knowledge/Database
Communications
Learning Management

Student

Outcome

Based

Experience

Knowledge

Knowledge

Experience

Student

Student

Transition to the Future??

CHANGING PARADIGMS


Nova Southeastern University (NSU) has been a pioneer in alternative distance education. NSU began its pioneering effort in alternative distance education in 1972 by grouping adult learners into clusters and having a national faculty fly to sites throughout the United States and elsewhere. NSU had the first graduate education programs in the U.S. to be delivered via computer and telephone into students' homes and workplaces through bulletin boards and electronic mail in 1983. NSU adapted the electronic mail technology for concurrent real-time interaction of faculty and students in an electronic classroom (ecr) in 1985. Three doctoral programs are in The Abraham S. Fischler Center for the Advancement of Education: (a) Child and Youth Studies (CYS), (b) National Ed.D. Program for Educational Leaders, and (c) Programs for Higher Education (PHE). The author first used ecrs in CYS in 1991. CYS will be described first, then PHE.

Child and Youth Studies

The Child and Youth Studies (CYS) program began as Early Childhood in 1972 and evolved into Early and Middle Childhood (EMC). EMC consisted of study areas spread over a three year period, culminating in Political Processes and Social Issues (PPSI). Two practicums were a part of EMC. Practicum I began near the beginning of EMC and could have been completed by the end of the second year. Practicum II could have been started at the beginning of the third year and could have been completed by the end of the third year or during the fourth year. EMC was re-engineered in 1988 by strengthening leadership areas and adding specializations. CYS begins with Leadership I and completes the didactic component two and 3/4 years later through Leadership II. CYS includes the completion of two practicums.

CYS was offered for the first time in 1989. After four clusters were started in non-traditional regular format, a cluster was started in a multi-tech format in 1991 followed by several others. The first cluster in a multi-tech format completed Leadership II in February of 1994. The second cluster completed Leadership II in February of 1995. The intent is to shift from on site meetings to online learning. All have access to electronic library and online services. A regular cluster started in Greenville, SC, in the fall yielded 28 of 30 students online by the end of Leadership I in January. Another regular cluster started in King of Prussia, PA, in the spring yielded students who could interact with peers in Greenwood and with peers in PHE. Appendix A contains information about the CYS program, research about Personal Data Variables (how learning styles and planning preference change over time and relate to creation of conceptual frameworks), and student topics.
LEADERSHIP II
START MULTI-MEDIA COMMENCE

- - - -
- - - -
- - - -
- - - -

ANALYSIS, SYNTHESIS, & TRANSFORMATION
VISION CREATION & CO-CREATION
ACTION PLAN CREATION & CO-CREATION
PRESENTATION OF VISIONS & ACTION PLANS

ELECTRONIC CLASSROOMS
NOTES
ELECTRONIC LIBRARY
INTERNET
AUDIOTAPE
VIDEOTAPES
PROGRAMS FOR HIGHER EDUCATION

The Programs for Higher Education (PHE) doctor in education degree program has a philosophical framework which emphasizes the application of theory and research to solve problems in each student’s work context. Professionals who enroll in PHE select one of five specializations: Adult Education (AE); Higher Education (HE); Vocational, Technical and Occupational Education (VTOE); Computing and Information Technology (CIT started in 1993); and Health Care Education (HEC started in 1994). Each professional is encouraged to design a “Personal Program Plan” with a focus on problems to be solved through three different methodologies in a time frame extending from three to seven years. The ABCs of program completion are: "A" three years, "B" four to six years, and "C" for seven years (see Attachment).

PHE consists of eight seminars, four practicums, a comprehensive examination and a major applied research project (MARP). The six core seminars are Curriculum and Program Planning, Governance and Management, Human Resources Development, Leadership, Research Methodology, and Societal Factors Affecting Education. Each student completes two seminars in one of the five specializations. Four practicums provide an opportunity to apply theory and research and sharpen skills in planning and conducting applied research using the three different problem-solving methodologies: development, evaluation and research. A MARP is a capstone learning experience that involves application of theory and research to a solution for a large problem.

Practicums are essential components of PHE. Exemplary practice, research, and theory are discussed in seminars and a level of awareness is evident in seminar papers. However, to what extent can co-creating a vision and a multi-year action plan be reflected in a series of seminar papers? Cluster Coordinators and Local Research Associates work with students in developing a practicum proposal. After a proposal meets standards in content items and form and style, a Practicum Evaluator (PE) reviews the proposal to provide additional perspective on content, like additional research, and the procedures that are proposed for the problem-solving methodology. After the proposal has been reviewed by the PE, a student has an "approved contract" for the project that must be completed in the next two years. A student may elect to work with a cluster representative while completing the project. The report is submitted to the PE for evaluation. A student may have up to two rewrites per practicum report. All students receive Guide to the Practicum Process, Guidelines for Form and Style, Learning Activity Package(s), Publication Manual of the American Psychological Association, and Outstanding Practicums and Major Applied Research Projects.
A. PATTERN OF DEGREE COMPLETION
(TRADITIONAL FORMAT)

YEAR 1

CORE & SPECIALIZATION SEMINARS

YEAR 2

PRACTICUMS

YEAR 3

MAJOR APPLIED RESEARCH PROJECT

PROSPECTUS PROPOSAL

PROJECT REPORT

PRACTICUMS

BENCHMARKING CONTINUOUS QUALITY IMPROVEMENT

REPORT COMPONENTS

INTRODUCTORY INFORMATION

CHAPTER 1

CHAPTER 2

CHAPTER 3

CHAPTER 4

CHAPTER 5

APPENDIXES
Human Resources Development (HRD) had its origin as Personnel-Human Resources Development (P-HRD) in the VTOE specialization. P-HRD had a focus on preparing workforces of the future. PHE recognized the centrality of HRD and converted P-HRD into a core seminar beginning in 1990. The seminar consists of three components: analysis, vision, and action plan development. Each student is asked to audit HRD in her/his work context and then select an HRD project for which s/he will create a vision and an action plan. A conceptual framework of the centrality of HRD is attached.

Professionals enrolled in PHE provide education and training services in many diverse contexts. The contexts include businesses of all types, health care systems, religious institutions, the full spectrum of schools and colleges, and government and the military. Professionals who have responsibility for computing and information technology and for vocational, technical, and occupational education at the middle and secondary school levels are admitted to the CIT and VTOE specializations in PHE. Students enroll in clusters throughout the United States. Cluster coordinators provide assistance to students as the liaison between students and other program personnel. A regional cluster was created in the early 1980s for international students and for individuals living in remote areas. The name was changed to "International Cluster" in 1992. A group of 14 students from Taiwan enrolled in P-HRD in 1986 but dropped out because of Ministry of Education mandates for extended residency requirements that have since been relaxed. The 14 students completed a learning styles test and planning preferences test and their scores were compared with the 28 other students in P-HRD (ED 290 860).

The core seminars are held one Saturday per month during the nine month academic year. Core seminars are also offered two weeks prior to the Summer Institute and in a special format for students in the International Cluster. This format provides a means for domestic students to accelerate or catch up. Two specializations are held in conjunction with the summer institutes with some work completed (a) prior to the summer institute, (b) during the summer institute and (c) following the summer institute. An in-depth understanding of significant ideas is difficult to ascertain for various concepts for professionals employed in quite different contexts. How does a faculty member from a Western culture achieve high levels of understanding about "accreditation" for students from Eastern cultures?

The week-long summer institutes focus on a theme and provide opportunity to hear international and national experts on the topic as well as concentrate on seminars, practicums, and PHE program requirements. Students have the opportunity to hear students whose practicums and MAfps were designated as outstanding (see Appendix B).
TRANSFORMATIONAL LEADERS

MARP

HUMAN RESOURCES
DEV

CS - Core Seminar
SS - Specialization Seminar
P - Practicum
MARP - Major Applied Research Project
MAJOR APPLIED RESEARCH PROJECT (MARP)

A MARP is a large scale application of theory, research, and exemplary practice to demonstrate high level problem-solving through one or more of the three research methodologies: development, evaluation, and research. One or more practicums often lead to a MARP. A MARP committee is comprised of a major advisor, a cluster representative, and a central office reader. A student can request committee members based on a rationale. Collaboration among students is encouraged, but students cannot do joint projects even though several individuals from the same work context may be progressing through PHE at about the same rate and time. MARPs consist of four phases: prospectus, proposal, project, and report. A student works primarily with a major advisor through each of the four phases until a high quality document is produced that is then reviewed by the other two committee members, sometimes in parallel and sometimes in tandem, based on preference of the committee.

Most students will use a development problem solving methodology to create a strategic plan for a curriculum, an entire program, distance learning, enrollment management, or some topic focused on people and technology. Many excellent strategic plans have been developed and implemented with assistance of formative and summative committees. However, creating a strategic plan for the future is far more complex relative to accountability, formatting and technology as stated in the attached comments by Ford and Carp and in What the Public Wants from Higher Education (Dillman, 1995).

How should electronic commerce, international trade, and other aspects relating to the global village be included in curriculum? How can a plan be co-created for borderless K-16 technology education in a computer based online format?

Creating Learning Communities

Attempts were made to Create Learning Communities (CLC) online during 1994-95. CLC online requires a critical mass of advisees who value collaboration electronically. Many students in AE and VTOE specializations were online and CIT students were approaching the MARP stage. By increasing the number of advisees in winter, spring, and summer of 1995, it became realistic to begin to plan for this project referred to as Creating and Sustaining Learning Communities. Having started five multi-tech clusters in CYS and having two clusters complete the didactic component in 1994 and 1995, provided insights into the use of electronic classroom and other technologies within seminars. How could insights be modified for a capstone experience that is far more unique than even the learning sequence in Leadership II? Also, how could some of the growth experience in the online format be shared with advisees who elected not to get online? What academic policies must be considered anew?
### Shifts = Policy Implications

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<td>education &amp; training</td>
<td>skill formation</td>
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<td>retraining</td>
<td>recurrent skill formation</td>
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<td>on-the-job training</td>
<td>on-the-job learning</td>
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<td>group and network learning</td>
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<td>balance of skills</td>
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<td>labor markets</td>
<td>skill markets</td>
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G.W. Ford. *Rethinking Skilling for a Restructured Workplace*  
Commission for the Future, 1990

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### New Directions in Education

- Education planning will be done by skill rather than by job;
- Instruction will be provided in modules rather than in courses;
- Courseware development will be automated via expert systems;
- Testing will be embedded and continuous rather than being an explicit event;
- Modules will be multisensory, accommodating various learning styles;
- Networks will provide access to worldwide libraries of instructional modules rather than limiting an employee to local catalogs;
- Education will be truly distributed rather than under the central control of someone other than the learner; and
- Employees can initiate necessary education experiences themselves.

Sylvia Charp. "Editorial." *The Technical Horizons*  
Several advisees and committee members have been online for several years. Competencies to use the technology will be attained when people see the value of their development. Memos were sent to all advisees on June 1 and June 29 that promoted Creating Learning Communities. Eight ecrs were held and a series of memos were sent to all advisees in the fall. The ecrs concentrated primarily on developing conceptual frameworks for projects. The ecrs are in the archives and accessible to all NSU people (see Appendix C).

Several advisees played key roles in helping to create and sustain our learning community. Terry Overlock shared information and his proposal to develop a multi-year plan for the integration of multimedia technology into the learning environment at Northern Maine Technical College (NMTC). Terry used work by Branson (1990) on changing educational paradigms. School-based student learning was dependent upon a teacher-focused paradigm that was often discipline-centered and textbook driven. A limited range of know-how and technology has yielded the current paradigm. Terry modified the knowledge-based paradigm for NMTC.

Virginia Moody and Pearley Cunningham sent memos to peers. E-mail messages led to Phillip Davis facilitating the first ecr on Sunday, August 20. Discussions led to the creation of conceptual frameworks. Richard Smith shared the conceptual framework for his project with peers in November that led to a series of peer TALK sessions. The conceptual framework by Phillip Davis was included in the December 7 memo. Research questions for many projects were included in the memo sent out on December 18. Phillip Davis made his approved proposal available electronically. As discussions evolved during the fall, several strategies were used to facilitate the development of conceptual frameworks of large scale projects and to apply project management and report writing techniques. Dr. Alan Algee used many techniques in his project on cultural diversity (see Appendix D).

The benefits of participation are many. First, many advisees have commented about feeling a part of a real LC. Second, the volume of material available in technology exceeds one person's resources to comprehend and the LC provides a means for collaboration. Imagine the complexity of analyzing interactive multimedia software packages and then creating a procedures manual for use in a 900 bed tertiary care hospital. Imagine the increment of growth of professionals who interact with Richard Smith in either contemporary or traditional means. Then, imagine Pearley Cunningham's project to develop a strategic plan to provide a multisite electronic engineering technology program at the Community College of Allegheny County. His project will involve contemporary content and its format, a delivery system format with some sessions online and student learning outcomes assessment formats (see Attachment).
<table>
<thead>
<tr>
<th>Research Questions</th>
<th>Chapter 2 Literature Review</th>
<th>Chapter 3 Methods and Procedures</th>
<th>Chapter 4 Results</th>
<th>Chapter 5 Discussion and Conclusions</th>
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</thead>
<tbody>
<tr>
<td>1. What constitutes an appropriate organizational framework for use in the manual in order to effectively train developers through each phase of development?</td>
<td>Locate Models, Review, Design Tax</td>
<td>Identify Styles used by others</td>
<td>Describe the results of the organization.</td>
<td>Literature review of organizational structures etc.</td>
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<tr>
<td>2. Which instructional systems design model lends itself most effectively to the development of interactive multimedia materials?</td>
<td>Design, Model, Develop, Develop</td>
<td>Development Guides, Tax</td>
<td>Indicate appropriate model for the design of multimedia.</td>
<td>Review of design models about good instructional design.</td>
</tr>
<tr>
<td>3. What skills and competencies are required of developers of interactive multimedia materials?</td>
<td>IMM development</td>
<td>Staff Training requirements</td>
<td>Staff Training requirements</td>
<td>Possible table summarizing skills.</td>
</tr>
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</table>

**Conceptual Framework**

The Development of a Strategic Plan to Provide a Multisite Electronic Engineering Technology Program at the Community College of Allegheny County

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**Research Questions**

1. **How can the new electronic communications technologies be used to provide a virtual learning community across the campus?**
   - Review college mission with respect to technology and the South Campus Profiles
   - Experiences of South campus students with email
   - Describe reduced enrollment and one campus nature of EET program
   - Administration with CUP and PCC college
   - Faculty committee work and AEG partnerships

2. **What is the appropriate strategic plan (a) to offer a multisite program by network communications, (b) to establish the needed coordination between program levels and institutions, (c) to develop an assessment process of the plan’s effectiveness?**

3. **Can the knowledge and skill levels expected by industry graduate be achieved through a multisite networked program?**

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**Chapter 1 Introduction**

- **Review College Mission with respect to Technology and the South Campus Profiles**
- **Experiences of South campus students with email**
- **Describe reduced enrollment and one campus nature of EET program**
- **Administration with CUP and PCC college**
- **Faculty committee work and AEG partnerships**

---

**Chapter 2 Review of Literature**

- Discusses topics in literature related to:
  - Email and conferencing
  - CAI, video and audio
  - Hypermedia
  - Integration
  - Computer-aided learning
  - Computer-based distance education
  - Asynchronous distance learning
  - Synchronous distance learning
  - SDL
  - World wide web and the Internet
  - Student DL situation
  - IET curriculum
  - Strategic planning at CCAC (use of SWOT and SWOTANNING)
  - Faculty concerns (1) lead (2) copyright (3) quality

---

**Chapter 3 Methodology and Procedures**

- **Step 1 Develop SWOT map with respect to the IET program with the assessment of the department members.**
- **Step 2 Remove of literature related to distance learning with emphasis on the use of the computer.**
- **Step 3 Contact other schools that are using using CAI approaches especially in ET related fields.**
- **Step 4 Develop plans for the use of technology and software needed for the Student DL station.**
- **Step 5 Prepare cost estimates for use of SWOT and for use of phone modems to include in strategic plans.**
- **Step 6 Present outlined cost plan to faculty and administrative boundaries.**
- **Step 7 Revise plan.**

---

**Chapter 4 Discussion and Conclusions**

- **Describe the results of the department SWOT**
- **Describe the results of contacts with other schools.**
- **Describe the development of the plan and the reactions of the two advisory committees.**
- **Describe the steps taken to prepare the strategic specifications for the Student DL, station and course.**
- **Describe the results of the interviews with the Dean and the MAPP advisor.**

---

**Chapter 5 Discussion and Conclusions**

- **How the plan relates to the literature specific to the plan to develop university.**
- **How the plan affects coordination with other programs at CCAC and other schools.**
- **How plans affect communication between the college committee.**
- **Incorporation of existing college planning and evaluation processes to keep plans accurate.**
- **Recommendations for future action.**
Sustaining Learning Communities

Sustaining Learning Communities (SLC) will occur at two levels (a) students and (b) alumni. It is impossible to predict how SLC will evolve over the next several months. First, students will be at various stages in the process of prospectus, proposal, project, and report. New advisees will be interested in creating a conceptual framework for which ecrs in the archives and memos already produced will be of great value. Advisees with approved proposals will be interested in project related issues. Even a casual look at the "Synthesis and Evaluation" memo for Fall 1995 will give insights to an agenda that will be ongoing for years.

SLC has already taken on a life of its own. A parallel increment of growth will be to go global. Graduates and students in Finland, Siberia, South Korea and Taiwan are online. PHE will be enriched with active participation by representatives from other parts of the world. Electronic transmission of draft documents and resources will enhance quality and reduce the degree completion time.

Alumni can contribute greatly to SLC. Dr. Niann-Chung Tsai was the first PHE graduate in Taiwan (see November 24 memo, p. 10). He is implementing his strategic plan as chair of the Telecommunications Department at the World College of Journalism and Communications. Niann is online and welcomes the opportunity to communicate with others. Dr. Yng-chien Sheu’s strategic plan was for the creation of a Printing Technology Department at National Taiwan Normal University. The plan was 1 of 30 projects funded from over 200 applications made to the Ministry of Education in Taiwan. Dr. Sheu is now implementing his strategic plan. A presentation at an International Conference on Technology Education in Taiwan in 1994 proposed collaborative planning to co-create a Sino-American K-16 Info Age Paradigm for Technology Education focused on "The Communication System" (ED 372 239). Institutions like the Community College of Allegheny County could create documents in digital prepress format and electronically send them to Taiwan.

Dr. Judith Hatula completed her HRD strategic plan for Telecom Finland, but her position was eliminated through restructuring; she is online. Dr. Algee is at the Siberian Theological Institute in Irkutsk, Siberia, and is online (73664.3513@compuserve.com). Dr. Chong-Sun Hong created a strategic plan for the use of innovative approaches to teach English Education at Hankuk Aviation University in Seoul, South Korea. She is implementing her strategic plan as head of the Foreign Language Institute at HAU.

Although their digital inbaskets may runneth over, these professionals welcome communications from Nova students. With their help, we are maturing into a globalversity.
THE COMMUNICATION SYSTEM

INPUTS
• People
• Knowledge
• Materials
• Energy
• Tools
• Fixed Capital
• Finance

FEEDBACK
• Encoding
• Transmitting
• Receiving
• Storing
• Retrieving
• Decoding
• Feedback

PROCESSES

OUTPUTS
• New or More Efficient Processes
• New Knowledge
• Impacts
• Services
• Communicated Information

人
知識
材料
能源
工具
固定資產
財務
編碼
傳送
接收
儲存
檔案
解碼
回饋
新或更有效
的新知識
影響
服務
溝通的資訊
CONCLUSIONS

Gordon Moore, founder of Intel, stated

"By the year 2000, you'll be talking to your computer. And it will probably respond - in 50 languages."


We are privileged to live during an extraordinary time, the turning of an era. We are surrounded with technologies that will fundamentally transform society and make possible the emergence of a learning enterprise with the potential to achieve higher levels of excellence and equality than can possibly be fully imagined by even the most experienced futurists. To achieve the dual mission priorities will require New Habits of Mind and Heart (ED 381 046 & 383 040).

The U.S. needs private and public sector establishments committed to inventing "Learning Communities" that empower humans to lead as opposed to merely adjusting to conditions. "Learning Communities" could accept a challenge such as "To design and perfect a human resources development system to produce knowledge workers of the 21st Century." While not all the knowledge is available to invent next generation learning systems, that must not deter us from striving toward such a goal. The words have a "future pull" magnetism to them that suggest that community leaders, practitioners, and scholars with expertise in theory, research and applications should be able to create bold, visionary systems with increased excellence. We need to co-create visions of K-16 borderless and seamless solution based learning models that use research in the cognitive sciences and communications systems and technology.

The world is undergoing fundamental restructuring. The European Union, the Pacific Rim countries, and the North American Free Trade Agreement countries are adjusting their economies in order to be the dominant region in the new world order. The nations, regions, and states that will be the beneficiaries of the structural change will be the ones that re-engineer human resources development (HRD) systems through creative organizational development (OD) strategies to produce the intellectual capital and knowledge workers who are needed for the emerging global village.

* * * * * * * * * *

We'll either move ahead to a high wage, high skill, high growth economy or we will be left behind...to compete with the Third World countries that call for little but strong backs and low wages.

Governor Zell Miller, Georgia
America 2000 Leadership Conference
January 13, 1992
BORDERLESS & SEAMLESS SOLUTION BASED LEARNING

ADULT YEARS
SECONDARY YEARS
MIDDLE YEARS
EARLY YEARS

BIOTECHNOLOGY
COMMUNICATIONS
CONSTRUCTION
ENGINEERING
MANUFACTURING
TRANSPORTATION

CONTINUOUS QUALITY IMPROVEMENT BENCHMARKS
TO PRODUCE HIGH PERFORMANCE LEARNER WORKERS

STRATEGIC THINKING: MAXIMUM SYNERGISM =
LEADERSHIP THROUGH
OD + HRD + TQC

<table>
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<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
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Organizational Development

Mission
Primary Program
Secondary Program
Climate/Culture
Institutional Effectiveness

Human Resources Development

Conceptual
Interactive
Technical

Hoped for Outcomes ← Actual Outcomes
BIBLIOGRAPHY


References


Tsai, N. C. (1993). *A Strategic Plan for Nontraditional, Off-Campus, Bachelor's Degree-Completion Programs at the World College of Journalism and Communications*. Unpublished major applied research project, Nova Southeastern University, Ft. Lauderdale.


Human Resources Development

Human Resources Development (HRD) is the critical component in making the transition from an Early Technical Era to an Advanced Technical Era. It is people who decide to create mission and visions statements, carry them out, or use know-how and technology. HRD consists of knowing people and how they behave in communities as well as how they use technology, including the use of databases and networks.

Conceptual frameworks are essential in two phases of a graduate program (a) the beginning of the program and (b) in the proposal phase of the culminating learning experience. Two workshops were conducted during the Summer Institutes in 1991 and 1992 to obtain student input to the logical order of core seminars. Human Resources Development was the choice for the first seminar based on the logic that (a) each student must understand "self" and (b) professionals must understand basic concepts in development (ED 351 499).

The Appendixes contain detailed information in the hope that (a) it will be beneficial to individuals attempting to re-engineer education and training and (b) individuals who are engaged in a similar process will share their experience -- to co-create a Globaliversity Learning Community.

Warren H. Groff
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Memphis, TN 38104
901-725-5287
groffw@alpha.acast.nova.edu

* * * * * * * * * * * * * * *

Problems cannot be solved at the same level of consciousness that created them.

Albert Einstein
APPENDIX A

Child and Youth Studies

The author of this paper taught 24 sections of PPSI between 1986 and the phase out of Early and Middle Childhood in the fall of 1993. He taught 14 sections of Leadership I, and 8 sections of Leadership II in Child & Youth Studies. The display is as follows:

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<tr>
<td>1994-95</td>
<td>#37</td>
<td>L-II</td>
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</table>

Numerous reports have been written about CYS. Some of the reports are available through ERIC (ED 352 126 and ED 357 829). In addition, CYS receives some mention in many reports of conferences and seminars: ED 370 181, ED 372 239, and ED 383 040.

Continuous Quality Improvement (CQI) techniques were used for several years. A CQI form was used in Leadership I, and a similar form was used in Leadership II. Then, a combined form was used. CQI and curriculum integrity were combined in Cluster #72, seeking feedback on specific topics from the practitioners enrolled in Leadership I.

A CYS summary statement is part of this appendix. Also, topics chosen by students are included.

* * * * * * * * * * *

THINKING

Thinking within a fixed circle of ideas tends to restrict the questions to a limited field. And, if one’s questions stay in a limited field, so also do the answers.

CREATING AND SUSTAINING LEARNING COMMUNITIES

by

WARREN GROFF
NATIONAL LECTURER
CHILD AND YOUTH STUDIES
NOVA SOUTHEASTERN UNIVERSITY
CREATING AND SUSTAINING LEARNING COMMUNITIES

Research indicated that graduate programs should prepare transformational leaders. A Child and Youth Studies doctoral program was created that begins with Leadership I and concludes the series of study areas three years later with Leadership II. Specializations are (a) Curriculum Development and Systemic Change, (b) Management of Programs (MOP) for Children and Youth, (c) Special Services for Children and Youth, and (d) Application of Technology to Education and Training. Specialization I and II are offered during a one week session in the summer. Practicums provide learning experiences to apply research and exemplary practice to solving problems. CYS is offered in traditional and multi-tech formats to cohorts of professionals in roles which impact on children and youth and their families. All students have access to electronic library and Internet.

In Leadership I, each student identifies two problems which intrude on her/him and specifies a list of issues for each problem. Each student collaborates with others in small groups to specify issues for each of two problems. Students are grouped by similarity of planning preference to begin the task of specification of issues for two problems. Problems relate to all America 2000 goals and objectives. Each list of issues must include technology, either know-how process technology such as strategic planning and total quality or communication and information technologies. Each student distributes a copy of two problems and the issues to clustermates who are encouraged to create a file for each problem they think may have relevance to them in the future. Several concepts introduced in Leadership I are built upon in the specializations. For example, strategic planning is presented more fully in MOP to focus on program planning.

Each student creates a Professional Development Plan (PDP) which contains (a) a brief analysis of self and work context and (b) goals and objectives linked to CYS learning experiences. Methodology and resources are identified to accomplish goals and objectives with particular focus on the "mind" and "systems." Students are grouped by dissimilarity of planning preference to begin the task of specification of methodology and resources. Each student keeps a Journal of significant conceptual, interactive, and technical learnings throughout CYS with particular emphasis on the areas of specialization. The PDP and journal are integrated with the latter being a record of increments of change. Each student makes a presentation to the cluster on an area of focus and the competencies and skills s/he will contribute to the newly created "Learning Communities" (see Attachment 1).

Each student pursues learning activities: research and evaluation, human development, an area of specialization, political process and social issues, and two practicums.
# Child & Youth Studies

**Specializations**

- Curriculum Development and Systemic Change
- Management of Programs for Children & Youth
- Special Services for Children & Youth
- Application of Technology to Education & Training

## Curriculum Development and Systemic Change

### Management of Programs for Children & Youth

### Special Services for Children & Youth

### Application of Technology to Education & Training

## Session I

- Societal Problems
- Leadership Theory/Research Practice
- Strategic Thinking & Operational Planning
- Organizational Development & Human Resource Development
- Concepts of Powerful Thinking
- Personal & Professional Development
- Integration: Professional Development Plan & Journal

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<thead>
<tr>
<th>CDS</th>
<th>MOP</th>
<th>SPS</th>
<th>APTEC</th>
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28
Leadership II is a demonstration of the application of leadership skills in the three step process: Analysis, Vision, and Action Plan development. Analysis consists of changes that have occurred throughout the program. Vision and Action Plan projects provide an opportunity to apply knowledge to a problem for after graduation. Many students have received external support for programs and projects.


Clusters taught by the author of this statement are:

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- #34 L-I
- #37 L-I
- #38 L-I
- #40 L-I
- #46 Multi-tech Cluster
- #50 Multi-tech Cluster
- #51 Alexandria, VA
- #54 Multi-tech Cluster
- #57 King of Prussia, PA
- #59 Multi-tech Cluster
- #62 Multi-tech Cluster
- #65 Wilmington, DE

Cluster 57 was the first group that was started in a traditional format which parallels a cluster taking CYS in a multi-tech format (#59). Judith Frier, math teacher in the Greenwich (CN) Public Schools, chose "Implementing the New Mathematics Standards Nationally" and "Utilizing Cooperative Learning Strategies to Support the Standards" as the two problems and issues which she is pursuing throughout CYS. Viola Stallings, Senior Systems Engineer for EduQUEST - An IBM Education Systems Company in Mt. Laurel (NJ), chose "Using Technology in Mathematics and Science" and "Using Technology in the Classroom" as the two problems and issues which she is pursuing through CYS. In Cluster 59, Fabio Zuluaga, a science - Spanish resource teacher at Central Middle Magnet School in Kansas City, MO, chose "Immersion Education" in science for middle school youngsters and "Computers in Immersion Classes" as the problems and issues which he is pursuing through CYS. Although students live in several countries (Canada, Israel, Puerto Rico, Virgin Islands) and most states, they are collaborating online, accessing and transmitting information electronically.
Gopher to Montgomery County Intermediate Unit

4. United States/

40. Pennsylvania (Other states can be selected to "surf")
8. Connectivity Center in West Chester/
11. Drexel University/
26. Lehigh University/
28. Millersville University/
29. Montgomery County Intermediate Unit Gopher Server/
33. PREPnet/
36. Penn State University/
39. Research for Better Schools/

29. Montgomery County Intermediate Unit Gopher Server/
1. About Montgomery County Intermediate Unit
2. More information about the MCIU, IUs and Districts/
3. Calendar of upcoming Events, workshops, conferences/
4. MCIU Online Resource Center/
5. MCIU Projects/
6. Interface: MUIU Education Technology Newsletter/
7. Libraries/ Research on the Internet/
8. Selected Resources for Educational Administrators/
9. Selected K-12 Educational Resources by Subject/
10. Areas of General Interest/
11. Gopher Servers Worldwide by Geographic Location/
12. Searching the Internet (Verica, Archie, Jughead)/
13. WAIS-based Information Searching/

2. More information about the MCIU
1. Information about the MCIU/
2. Other Pennsylvania IU or School District Servers/
3. Abington School District (Phase 3)
4. Cheltenham School District (3)
5. Colonial School District (3)
6. Hatboro-Horsham School District (1)
7. Jenkintown School District (2)
8. Lower Merion School District (3)
9. Lower Moreland School District (3)
10. Methacton SD (3)
11. Norristown SD (1)
12. North Penn SD (3)
13. Perkiomen SD (3)
14. Pottsgrove SD (3)
15. Pottstown SD (3)
16. Souderton SD (3)
17. Springford SD (3)
18. Springfield SD (1)
19. Upper Dublin (3)
20. Upper Merion (2)
21. Upper Moreland (3)
22. Upper Perkiomen (3)
23. Wissahickon (3)
We started a traditional cluster in Greenville, SC, in October. Many professionals are online. They realize the advantages of accessing electronic library, Internet, and collaborating electronically with peers elsewhere. They can access Holly Jobe’s interface from the Montgomery County Intermediate Unit, CHESCONet, and many other resources.

We will start a traditional cluster in King of Prussia in February. Orientation is on Feb 10-11. Leadership I dates are scheduled on February 12, March 18, April 22, and May 20, 1995. During Leadership I, professionals will learn basics of bold, creative, transformational leadership and create a Leadership Development Plan for the next few years. They could begin to interact online with their counterparts in other states and several foreign countries and could help create and sustain a learning community for "Readiness," "Math, Science & Technology," or other America 2000 goals.

Leadership II will be held in Nov & Dec 1998 & Jan 1999. During Leadership II, professionals will synthesize research and practice on Rethinking to Restructure and Revitalize

   | Synthesis of Vision Creation | Multi-year Action Plans  
   | Research & Practice & Co-creation |

Goal 1 Readiness
Goal 2 Graduation
Goal 3 Core Subjects
Goal 4 Staff Development
Goal 5 Math, Sci & Tech
Goal 6 Adult Literacy
Goal 7 Safe Environment
Goal 8 Parental Involvement

CYS will also start a multi-tech cluster in February. The multi-tech format provides an opportunity to produce a higher quality "Third Wave Transformational Leader" than can be produced in a regular format (see Attachment 3). Each new cluster is the beneficiary of lessons learned from feedback from professionals progressing through an "Info Era Paradigm." Imagine a group of professionals working on a common focus such as "Readiness to Learn" or "Math, Science, and Technology." Imagine 20 to 30 professionals dealing with technology education online and accessing research and exemplary models through Internet. Or, imagine 20 to 30 professionals from school districts and area colleges collaborating online on a 4+2+2 program (see EA 025 801). An area multi-tech cluster can be started almost anytime.
CYS PROGRAM

TRANSFORMATIONAL LEADERSHIP

LEADERSHIP I

LEADERSHIP II

AWARENESS & UNDERSTANDING

COMMITMENT & DEDICATION
PROBLEM AND ISSUES, GREENWOOD CLUSTER #69, Nov 1994

JB High Risk Teens Need Family Support in School
High Risk Teens Fail in School

RB Changing Negative Attitudes
Decreasing the Number of Low Academic Achievers

CB Improving Academic Achievement of Math Students 6-12
Student's Utilization of Technology

MB Balancing Instruction in Whole Language Classroom
Developing Reading Comprehension with Writing Skills

CB Reading Readiness
Instructional Techniques

CC Improving Self-Esteem of At-Risk Elementary Students
Increasing Parental Involvement of At-Risk El Students

WD Improving Parental Involvement
Integrating Technology and Writing

NE Parenting Skills Education
Wide Range of Abilities Among Kindergarten Students

AF Improving Early Childhood Programs
Improving Assessment Practices in Elementary Schools

AH Literature-Based Reading
Group Interaction

CJ Enhancement of Academic Skills of the Visual Learner in
Middle School through Technology in the Media Center
Enhance of Middle School Curricular Instruction via Tech

MK Lack of Cultural and Social Awareness
Low Academic Achievement in Science

SL Developmentally Appropriate Theory to Primary Class Practices
Eliminating Retention in the Primary Grades

AM Low Rate of Correction for Articulation Disordered Students
Needed Change in Service Delivery Model for Language Dis Students

LM Conflict Resolution with At-Risk Students
Special Education Students in Regular Classes

JM Adolescent Black Males At Risk
Lack of Parental Involvement

AP Whole Language in U.S. vs Whole Language in Other Countries
Chapter, ADD, ADHD, LD, Regular, and Gifted in the Same Classroom
Providing Leadership for Quality Parent/School Relationship
Preparing Rural El Children to Live in a Tech Driven Global Econ

Sch Interventions for Dealing With Stressful External Influences
Meeting the Needs of Low-Achieving Students

Linking Schs, Agencies, and Community for Delivery of Spec Service
Linking Parents to Schools

Implementing Act 135 Standards at Summit Drive Elementary
Teaching Students in First Grade via Individualized Learning Style

Multicultural Education
African-American Parenting Strategies

Technology and Instruction
Violence in Schools

Educating the ADD/ADHD Student
Preparing Students for the Technologies

Meeting the Needs of ADHD Students
Successful Integration of SLD Students

Implementing Technology Across the Curriculum
Increasing Middle School Gender Equality in Technology

School Dropouts
Adult Illiteracy

Communication Skills Through Computers vs Sign Language
Parental Perceptions and Attitudes Toward the Effectiveness
of Speech Therapy Services in Clinics and Public Schools

Low Reading Ability in Junior High School
Inclusion and What It Should Do for York Junior High School

Poor Student Achievement
Insufficient Hands-on Science
PROBLEMS AND ISSUES, KING OF PRUSSIA CLUSTER #72, MAY 20, 1995

CB   Educating Special Education Students with Regular Students
     Education of Multicultural Students

MB   Schools Providing After Care Program
     Changing Standardized Testing in a School

NB   Programs Offered to Gifted and Talented African Americans
     Rethinking the Language Arts Program at W Windsor HS

RC   Negative Stereotyping of School Guidance Counselors
     Inadequate Use of Technology in the HS Guidance Department

LC   Pre-School Survival After Federal Funding
     Parental Interest in the Urban Pre-School

SD   Required Course in Home Economics to Meet PA State Proficiency
     Development of a Preschool Program Within the High School

LF   Effective Management Structure Within the Foster Care System
     Effective Service Delivery to Adolescents in Out-of-Home Care

DH   Ability Based Reading Instruction
     Grade Retention Practices

SJ   Professionalism in Relation to School System Policies
     Attitudes of Parents Toward School System Policies

AL   Human Resources Management in Child Care
     Recruiting Quality Teachers for Center Based Child Care

SL   Follow-Up Contact with Discharged Patients
     Staff Training to Consistent Performance

GL   Teamwork in a Treatment Facility for Emotionally Disturbed
     Staff Dev Plan for the Children's Home of Burlington County

KM   Gifted Education and P.L. 94-142
     Inconsistencies in Identification of Gifted Students

CM   Wraparound Services in an Inpatient Mental Health Hospital
     Transitioning Students from IMHH Back to Regular School

WM   Implementing a School Based Peer Mediation Program
     Helping Adolescents Remain Drug Free During Aftercare

GN   Mainstreaming Special Needs Children in Performing Arts
     Parental Involvement in Schools

JN   Low Motivation of Physical Education Students
     High Rate of Absenteeism of Physical Education Teachers
AWS Pro Recognition of Early Childhood Ed as a Scholarly Pursuit
Multiple Services of the Beaver C. Campus Child Care Center

LS Lack of Parental Involvement in Preschool
Clarification of the Role of the School Social Worker

ALS Restructuring the Time Schedule in a High School Setting
Development of an Alternative Education Program

GS American Sign Language as Primary Modality
Non-traditional Testing

AAS Computer Driven Education in a Small Residential School
Preventing Violence in a Maximum Security Rehab Facility

IS Sick Children and Children Not Properly Immunized in School
Clients Coming into Health Services for Non-Medical Purposes

JT Recognition of Family Child Care as a Profession
Quality Criteria for Family Child Care

YT Retention Rate of African Americans at Shippensburg University
Parental Involvement to Enhance Learning of At-Risk Students

STT Comprehensive Learning in the Mainstream: Inclusion Revolution
Action for Inclusion: Total Community & School Improvement

PW Family Child Care Providers High Risk Conditions
FCC Work in Isolation and Have Limited Training Opportunities

SW Implementation of a Better Work Environment
Improvement of Student Motivation
TO: Susan Duncan
Amy Sala
Glenna Shire

FROM: Warren H. Groff

RE: Creating a Learning Community

DATE: April 28, 1995

The six of you may find you have some similar interests. Susan, Amy, and Glenna are starting Child and Youth Studies in King of Prussia, PA. Susan will focus on knowledge of basic child health and child care skills at Colonial School District. Amy has responsibility for the early child care degree program and the Child Care Center at Beaver College. Glenna has a background in speech pathology and audiology and will focus her work on deaf and hearing impaired students using American Sign Language in the Wissahickon Schools.

Cheryl and Jim are members of the Greenwood Cluster and Habiba is a member of the West Florida Cluster in the Programs for Higher Education. Cheryl is a teacher in Wee Wisdom Day School and at Savannah Technical Institutes; she is taking Human Resources Development (HRD) and will work on a vision and action plan project for young children. Habiba has a home economic background and works for the Cooperative Extension Service; she completed an outstanding paper entitled "A Strategic Plan for A Nutrition Education Program in Barbour County by the Year 2000." Jim is working on a major applied research project that will produce some learning modules in agricultural education for middle school youth at Lowndes Middle School, Valdosta, GA; he will analyze the possibility of doing a module online. Imagine a series of nutrition modules that could be created and sent online throughout the U.S. or via AgSat.

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4031 Pilgrim Road
Plymouth Meeting, PA 19462
H 610-832-1556

Amy Sala
199 Summit Road
Malvern, PA 19355
H 610-644-3328

Glenna Shire
8904 Patton Road
Wyndmore, PA 19038
H 215-233-0260

Cheryl D. Cale
100 Scholar Road
Guyton, GA 31312
H 912-728-3593

Habiba Shaw
116 Creek Circle
Eufaula, AL 36027
H 205-687-2090

James Corbett
506 Copeland Road
Valdosta, GA 31601-6669
H 912-244-8810
TOTAL QUALITY COMMITMENT

LEADERSHIP I

1. Paper #1 - Workplace and Problems
   a. Class Meeting #1 (CM)
   b. Intro to Societal Problems & Issues
   c. Leadership Theory and Research
   d. Strategic Thinking and Planning
   e. Prioritization of 25 National Problems
   f. Modified Myers Briggs
   g. Kolb Learning Style
   h. Torrance Hemisphericity
   i. Hershey & Blanchard LEAD

2. Paper #2 - Prof. Dev. Plan
   a. Organizational Development
   b. Human Development
   c. CYS Program Components
   d. Goals & Objectives While Taking CYS

   Class Meeting #2 (CM)
   e. Organizational Development
   f. Human Development
   g. Problems and Issues

3. Paper #3 - Problems and Issues
   a. Oral Presentation - Problems and Issues
   b. Test - Synthesis of Leadership I
   c. Introductions to Grantspersonship
   d. Reinventing the Corporation
      - Partial Technological Deinstitutionalization

LEADERSHIP II

4. Paper #1 - Synthesis and Evaluation
   a. Significant Concepts - Consensus
   b. Visions, Scenarios, Strategic Directions

5. Paper #2 - Vision and Preferred Scenario
   a. Oral Presentations
   b. How To Develop A Multiyear Action Plan

6. Paper #3 - Action Plans, PDP II
   a. Oral Presentations
   b. Consensus on Priorities
   c. RRR + Developmental Tasks for the 21st Century

Key
5 Absolutely Essential  2 Nice to Know, But
4 Extremely Important  1 Minimal Importance
3 Somewhat Important  NA Not Applicable
Child and Youth Studies

Leadership I in Child and Youth Studies (CYS) has been developed by a team of professionals with extensive background in practice and scholarship. CYS is committed to continuous quality improvement through evaluation and feedback of professionals.

The didactic format of CYS in the traditional delivery system consists of four class sessions. Each session could be viewed as having four segments: Early Morning (EM), Late Morning (LM), Early Afternoon (EA), and Late Afternoon (LA).

Attached is an evaluation instrument with two parts. The first part is an opportunity to "weigh" each aspect of the learning progression and indicate its value. The second part consists of four open-ended questions. The feedback will be of great value to sustain continuous quality improvements. The format of the first part of the evaluation instrument is as follows:

**SEMINAR PLANNING SHEET**

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### Continuous Quality Improvement

**Building Learning Communities**  
**Leadership I**

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<th>4</th>
<th>3</th>
<th>2</th>
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**Session 2**

**Early Morning**
- Rethinking, Restructuring, Revitalizing
- Significant Concepts & Implications
- America 2000, Background & Gov Nelson comment
- Unity of Purpose
- America 2000 Goal Categories
- Changing Paradigms: from Teacher Centered to Technology-Based Paradigm
- Early Years - Readiness, Wellness
  - Objectives 1, 2, & 3, Multi-year Plan
- Interestablishment Collaborative Planning

**Late Morning**
- Middle Years - Math, Science, & Tech
- Performance (Outcomes) Based Education
- Technology Education
- Exchange of Problems and Issues Handouts

**Early Afternoon**
- Leadership Development Plan (LDP) Explanation
- Small Group Work on Setting Goals & Objectives
  - Categories could be Understanding Self & Others, Understanding the Organization(s), & Problems and Issues

**Late Afternoon**
- Synthesis - Leadership Journal
- Leadership Development Journal - Paper #2
- APA and Formatting the Paper
- Other Details - Date Due, Handout
- Closing Comments
- Handouts
  - America 2000 and Early Years Packet
  - Transitional Years Packet
  - A Blueprint for Going Global Packet
  - Human Resources Development Packet
  - Resources Packet (Cover PL 103-227)
  - Example of Journal and LDP Paper

### Key
- 5 Absolutely Essential
- 4 Extremely Important
- 3 Somewhat Important
- 2 Nice to Know, But
- 1 Minimal Importance
- NA Not Applicable
<table>
<thead>
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<tbody>
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<td>Building Learning Communities</td>
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<tr>
<td>Leadership I</td>
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Opening Letter of National Faculty

### Session 1

#### Early Morning
- Transformational Leadership
- Rethinking, Restructuring, Revitalizing
- Leadership Journal
- Overview of CYS - Figure 1 in Study Guide
- Problems and Issues - Topic I in Study Guide
- Leadership & Change - Topics II & III in SG
- Highlight topics in Rosenbach & Taylor
- Emphasis on "Vision: A Focus on the Future"
- Take the Modified Myers Briggs Test

#### Late Morning
- Strategic Thinking & Operational Planning (IV)
  - Demographic and Social Information
  - Economic and Technological Information
  - (Continuous Voice Activated Powerbook)
  - Governmental Planning Information
  - Quality Education System Display + Data
- Organizational & Human Resources Dev - Topic V
- Take Kolb & Hemisphericity Tests

#### Early Afternoon
- Problems and Issues Discussion & Explanation
- Small Group Work Based on Similar Interests

#### Late Afternoon
- Synthesis - Leadership Journal
- Problems and Issues - Paper #1
- APA and Formatting the Paper
- Other Details - Date Due, Handout
- Closing Comments (Including Diversity in #72)
- Handouts
  - Research & Development - Dissemination
  - Seven Basic Types of Intelligences
  - Beginning Caring & Learning Environments
  - Resources Packet
  - The Grantsmanship Center Subscription Form
  - Packet of Lists of Problems and Issues
  - Example of Journal and P & I Paper
  - Calendar, February through May

### Key
- 5 Absolutely Essential
- 4 Extremely Important
- 3 Somewhat Important
- 2 Nice to Know, But
- 1 Minimal Importance
- NA Not Applicable
### Continuous Quality Improvement
#### Building Learning Communities
##### Leadership 1

<table>
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</table>

- Access to National Faculty: E-mail & Telephone
- Response to Requests for Information
- Memo 1 "Creating Learning Communities"
- Vision & Action Plan: "Learning to Learn"
- Changing Paradigms
- Core Subjects Voluntary National Standards
- The Koalaty Kid Alliance + Projects
- Gopher to MCIU, Interface, & CHESConet

#### Session 3

**Early Morning**
- Rethinking, Restructuring, Revitalizing
- Significant Concepts & Implications
- Learning Styles - Dr. Thomas Craney

**Late Morning**
- Changing Paradigms, Technology-Based Paradigm
- Leadership - Societal Factors, Leadership Research, Strategic Planning, Org Dev & HRD, Powerful Thinking, and Prof Dev
- Topic VI: Transformational Thinking - Reframing, Mindfulness, Holistic Thinking, Creativity, Cybernetic Thinking, Systems Thinking, Chaos Theory, and Military Strategy
- Elaboration of Visions Creation in Early Years
- EDUCARE: Establishment Collaboration
- Elaboration of Visions Creation in Middle Yrs
- Images & Smart Home
- Visioning: Content and Process

**Early Afternoon**
- Leadership - Dr. Carmen Dumas
- LDP Addendum: Methodology & Resources
  - Focus on "Mind" - Self and Others
  - and "Systems" - Databases and Networks
- Matching Resources to LDP Goals & Objectives
- Small Group Work Based on Myers Briggs Scores

**Late Afternoon**
- Synthesis - Leadership Journal
- LDP Addendum - Paper #3
- APA and Formatting the Paper
- Date Due, Exam, Handouts, Oral Presentation
- Closing Comments
- Handouts
  - IDEA - Information Technology
    - Technology Times, April 1995
  - Vocational-Technical Ed Consortium
Continuous Quality Improvement
Building Learning Communities
Leadership I

Access to National Faculty: E-mail & Telephone
Response to Requests for Information
Memo 2 "Creating Learning Communities"
  Technology Defined
  Learning Styles and Planning Preferences
  Visions
  New American Schools Development Corp info
  ABC's of Leadership
Memo 3 "Creating Learning Communities"
  Synthesis of CYS Development Progression
  Synthesis of Early Years Full Service Model
  Synthesis of Middle Years Math, Science, & Tech Integrated Model
  Focus on Conceptual, Interactive, and Technical Competencies of Leadership

Session 4

Early Morning
VII Personal & Professional Dev for Ldrship
Student Oral Presentations

Late Morning
Final Examination for Leadership I (Fairness)

Early Afternoon
Fiscal Resources Development: Grantsmanship

Late Afternoon
Learning Communities of the Future: 2020
Sustaining Learning Communities
Between Leadership I and II
Ldrship II - Analysis of Journal, Dec 20, 1997

Please respond to the four questions on the next page.

Key

5 Absolutely Essential
4 Extremely Important
3 Somewhat Important
2 Nice to Know, But
1 Minimal Importance
NA Not Applicable

We are made wise not by the recollections of our past but by the responsibility for our future.
George Bernard Shaw
TO: Professionals in the Leadership II Learning Community
FROM: Warren H. Groff
RE: Leadership II
DATE: December 12, 1994

I trust you are well and have completed the work for PPSI. This memo will add greater clarity to the analysis and synthesis assignment. Two "elective" ecrs are scheduled on Monday, December 19 and Wednesday, December 21, 9:00 p.m., Eastern Standard Time in classroom 3, to provide an opportunity to (a) raise questions about the analysis and synthesis assignment and (b) identify the project for which you will create and co-create a vision and action plan.

You submitted a copy of your journal. Many individuals submitted a document which was a continuation of the way in which s/he started keeping the journal in Leadership I. A few individuals submitted their journal in a listing. The first step will be to complete the journal through PPSI, Practicum II, etc.

Second, write the analysis and synthesis paper. Review your original Professional Development Plan and your journal and write a paper on CHANGES that have taken place. Attached is (a) a listing of planning preferences, learning styles, and hemisphericity scores and (b) a display of changes in planning preferences. How have your conceptual frameworks changed? To what do you attribute the changes? How will you use these insights in leadership activities? What advice do you have for me for future groups such as Cluster 69? Because you are taking CYS in a multi-tech format, how has technology been used to accomplish goals - objectives and complete CYS requirements? Emphasize your specialization. To what extent have you accessed resources electronically? To what extent have you used TALK, the Electronic Conferencing System, or the Electronic Library? How have you used Internet? Have you done on-line searches? Develop a display similar to the "Role Changes" sheet which you were given in October.

The narrative section of the paper should not exceed 10 typed, double spaced pages. That does not include title page, table of contents, references, and appendixes.

During the ecr, I will ask each of you to share with your clustermates the project for which you will create a vision and action plan. You were given a conceptual framework that represents a vision for ERUCARE. Enclosed are a few other conceptual frameworks. I look forward to talking with you.
Leadership II, National Cluster II (#50), October 1994

**PERSONAL DATA VARIABLES**

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- 14.8 8.8 16.3

**Low**
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**Notes:**
- High and Low scores indicate areas of strength and areas for development.
- Hemisphericity suggests left (L) or right (R) dominance in processing information.
- Kolb Learning Styles: CE (Concrete Experience), RO (Reflective Observation), AC (Abstract Conceptualization), AE (Active Experimentation).
LEARNING STYLE PROFILE

Norms for the Learning Style Inventory

Concrete Experience

ACCOMODATOR

DIVERGER

Active Experimentation

Reflective Observation

CONVERGER

ASSIMILATOR

Abstract Conceptualization

CLUSTER 50
FALL 1994

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### ERAS

**PAST**

**PRESENT**

**FUTURE**

### ISSUES

- **ACCESS**
- **COST**
- **PRODUCTIVITY**
- **QUALITY**
- **RESTRUCTURING**
- **REVITALIZING**
- **SYNCHRONIZING**
- **THINKING GLOBAL**

---

### "FUTURE PULL" PLANNING

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<td><strong>Internal Environment (Past, Present, Future)</strong></td>
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<td><strong>ACTION PLAN</strong></td>
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COMPONENTS OF A COMPREHENSIVE EARLY CHILDHOOD WELLNESS PROGRAM

- WELLNESS GUIDEBOOK
- CHILDHOOD WELLNESS CURRICULUM
- STAFF TRAINING
- POLICY
- PARENT TRAINING
- PART-TIME NURSE
- ANNUAL HEALTH FAIR
- ON-SITE MONTHLY IMMUNIZATIONS
- COMMUNITY INVOLVEMENT
- PROVIDE ON-SITE CLINIC
- UPGRADE LEARNING ENVIRONMENT
- SEEK GRANTS/FUNDING

EDUCARE®: A Comprehensive Early Childhood Wellness Program
Current Options for Educational Technology

- Curriculum Integration
- Multimedia
- Distance Education

The Vision

Computer-Based Distance Education
A Vision for Social Services Where Information Empowers

Changed Society
Informed Action
Ownership
Empowerment
Knowledge

Social Services
Client

Technology-Assisted
Information Dissemination and Exchange

Social Services Provider

Technological
Social
Political
Demographic
Economic
Forces

52
Child-Centered Full-Service School

Student

Future

Present

Outcomes

Economic

Technology

School

Business

Social Services

Health
PARTICIPANTS IN THE "LEARNING-A-LIVING" SYSTEM

Source: National Urban League.

WORK INCENTIVE MODEL FOR CAREER PATHWAYS

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<th>Academic Studies</th>
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<td>Summer Employment</td>
<td>Continued Career Studies (School-Based Learning)</td>
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<tr>
<td>10-15 Hours (per week)</td>
<td>BUSINESS/INDUSTRY (Work-Based Learning)</td>
<td>10-20 Hours (per week or full-time apprenticeship)</td>
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OJT/Co-op/Internship/Apprenticeship
Real-Time Employment

James L. Hoerner, Virginia Tech, Blacksburg, VA 24061. 1993
The Boston Private Industry Council
2 Oliver Street
Boston, MA 02109
APPENDIX B

Seminars and Practicums

The author of this paper taught 27 sections of Governance and Management, 9 sections of VTOE, a section of Leadership via directed study, and 14 sections of HRD in the Programs for Higher Education. Numerous reports have been written and are available through ERIC. Some of the reports contain exemplary papers written by students for seminars.

Continuous Quality Improvement (CQI) techniques were used for several years. The latest edition of CQI form used in EVTO and HRD are in this appendix.

The author began to read practicum proposals and reports in the vocational, technical, and occupational education (VTOE) specialization in 1989. The VTOE specialization was comprised of Personnel - Human Resources Development (P-HRD) and The Emergence of VTO (EVTO). He read 69 VTO proposals and/or reports through December 1994. P-HRD was converted into Human Resources Development (HRD) beginning fall 1991. He has read 275 HRD proposals and/or reports. A Computer and Information Technologies (CIT) specialization was added beginning 1993. The transfer of VTO practicums to another reader was to assign CIT practicums to the author beginning in July, 1994. He has read 16 CIT practicum proposals/reports.

Continuous Quality Improvement (CQI) in Practicums was used for several years. The 1995-96 edition of the CQI in Practicums form is in this appendix. Applying CQI to MARPs is far more difficult in content and process. A list of MARPs is with the August 29 memo.

* * * * * * * * * * * *

INFRASTRUCTURE CHALLENGES

The biggest "Infrastructure" challenge for this country in the next decade is not the billions needed for railroads, highways, and energy. It is the American school system, from kindergarten through the Ph.D. program and the post-graduate education of adults. And it requires something far scarcer than money -- thinking and risk-taking.

Reports and Exemplary Student Work, 1984-93

Reports about VTOE were written to record learning experiences and make them available to others. Many students indicated a desire to see exemplary student work. ERIC began to accept reports with student papers appended to the documents beginning in 1991.

Reports

ED 272 247  VTOE (P-HRD 1984 and E-VTO 1985) Getting Started
ED 290 860  VTOE (P-HRD 1986 and E-VTO 1987) East and West
ED 319 860  VTOE (P-HRD 1988 and E-VTO 1989) Summative
Designing Information Age Learning Paradigms

Reports with Exemplary Student Work, 1991-93

ED 335 519  VTOE (P-HRD 1990 and E-VTO 1991)
"Leadership for Innovation and Change" workshop.
Complete set of papers by Polly Schultz:
1. Redesign of the Educational System,
2. The Emergence of the Technical Society,
3. Studies About Education,
4. Intellectual Capital Formation, and
5. Intrapreneurship in Postsecondary Education.

ED 351 499  VTOE (E-VTO 1992)
Complete set of papers by Donna Smith:
1. The Emergence of the Technical Society,
2. Improving Postsecondary Vocational Education,
3. Intellectual Capital Formation,
4. Technology and Distance Education, and
5. Three-Year Student Success Program for International Students.

A Refocusing of the Educational Process in Health Occupations at Sarasota County Technical Institute
-- Deborrah R. Metheny
Developing a Total Quality Learning Environment
-- Karen J. Ziegler

ED 359 412  Governance & Management, Dallas and
Human Resources Dev, Springfield, MO, Fall 1992
Complete set of papers by Richard Pullen
1. An Analysis of Governance Structure of the
   Amarillo Hospital District and Northwest Texas Hospital
2. Strategic Planning: Delivery of Quality Care Through Nursing’s Commitment to Quality Improvement
3. Goals: Implementation of a Program to Enhance Nursing Commitment to Total Quality Improvement at Northwest Texas Hospital
Complete set of papers by Kathryn D. Pearson
1. An Analysis of Human Resources Development at Arkansas Tech University
2. A New Vision for Elementary School Mathematics at Arkansas Tech University
3. The Restructuring of Developmental Mathematics at Arkansas Tech University

Vision 2000: A Pedagogy Shift - Critical Thinking and Caring Strategic Human Resources Development Plan for Restructuring Nursing Department, Curriculum Southwest Missouri State University, West Plains Campus -- Juanita J. Roth

Analysis of Planning Preferences
Science, Math, & Technology by Madeleine Friedman
Electronic Library
Practicums and MARPs
Human Resources Development
VTOE (P-HRD & E-VTO)
Framework of Ch 5 by Sarah Simpson-Ussery
MARP Abstracts
Science & Tech: Impact on Workplaces & Workforces

ED 357 829 Leadership I, Child and Youth Studies
Most recent report on a multi-tech group in ERIC
Complete set of papers by Daniel R. Hayes
1. Primary Challenges for Leadership in an Air Force Education Services Program and a Private Counseling Practice,
2. Personal Leadership Development Program, and
3. Problems and Issues.

Complete set of papers by Deborah W. Whaley
1. Effects of Early Childhood Education Viewed as a Problem of Secondary Importance in the Realm of Business and Industry,
2. Leadership: Separating the Dross From the Gold
3. Leadership Development Plan, and
4. Problems and Issues Pertaining to Quality Child Care and Professional Standards in Child Care.
Exemplary Student Work, 1993-94

South Florida Cluster - ED 371 164
1. Strategic Planning and the Role of Human Resource Development at Nova University - G. Stiber
2. The Development of a Plan to Design and Deliver Programs Based on Client Needs Assessment for the Center of Hospitality Management at Nova University - Dana V. Tesone
3. A Model for Faculty Development in Occupational Therapy - Pamela K. Shaffer
4. The Need for Teamwork Training for Faculty and Staff at the Postsecondary Level - L. Pickard

Phoenix Cluster - ED 372 185
1. CAE-LINK Training Operations Strategic Action Plan - Steven J. Tourville
2. Central Training Academy Human Resources Department Plan of Action - James R. Frazier
3. The Creation of Functional and Discipline Specific Remote Computer Labs for the Implementation of Computing and Information Technology Across the Curriculum at Chandler-Gilbert Community College - Wayne G. Gautreau

Tampa Cluster ED 372 277
1. An Instructional Plan for Staff at Sarasota County Technical Institute on the Americans with Disabilities Act of 1990 - Pamela Bull LaGasse
2. Human Resources Development Plan for Hillsborough Community College - Sherry L. Kersey
3. Action Plan to Implement Technology Seminars at Embry-Riddle Aeronautical University - Shirley Waterhouse
4. Expanding the Technology Horizons at Florida Community College at Jacksonville - Margaret Dooley
5. Five-Year Action Plan for Nova University’s Programs for Higher Education (PHE) to Require Personal Computers - Robert W. Hill

Glossary: Human Resources Development - Robert Hill

Orange County Cluster ED 372 239
1. Development of a Vision for Communications in a Total Quality Training Facility, Fleet Training Center, San Diego - Gail J. Palmisano
2. Development of a Video Training Model to Increase Reliability of Neonatal Instructor Grading at Crafton Hills College - Arnold L. Kosmatka
Total Quality Commitment
Building Learning Communities
E-VTO 1992

Spring - E-VTO Study Guide & Textbooks
Tech-Prep Associate Degree
Technology 2001
Welcome Letter and Memos

E-VTO Specialization & Summer Institute

Sun Specialization
Overview to BLC
Modified Myers Briggs
Small Groups - Rationale of Proposal

Mon Specialization
Structured Roundtable - 3 Rs
Faculty Office Hours
Structured Networking By Concentration

Tue Specialization
Enrollment Management: Student Success
Substantive Topic (Math, Sci, Tech)
Human Resource Development & TQC
Small Groups - Rationale & G-O (3 x 3)

Wed Specialization
Org Dev + HRD + TQC
Library + Info Ser
Small Groups - Methodology

Thu Specialization
"Developmental Tasks"
Faculty Office Hours

Fri Specialization
Practicums, Comprehensive, & MARP
How To Make Oral Presentations
Small Groups - TQ Evaluation & Budget

Sat Specialization - Total Group
Oral Presentations of Action Plans

Synthesis Paper - Action Plan

Key
5 Absolutely Essential  2 Nice to Know, But
4 Extremely Important  1 Minimal Importance
3 Somewhat Important  NA Not Applicable
Total Quality Commitment
Building Learning Communities
Human Resources Development

Instructions
- Cover Memo
- Instructions & Assignments
- Title Page
- Sources of Information
- ERIC Document Resumes
- ERIC Documents List
- Vita
- Evolutions in Technology
- Printing 2000

Study Guide
- Textbook

Session 1
- Overview of PHE and HRD
- Paper 1 - HRD Audit
- Oral Presentations on HRD Audit
- Modified Myers Briggs
- Visions
- Visions Co-creation
- Visions Paper and Formatting
- Student Progress Information
- Student File Folders
- HRD Learning Community Memo

Session 2
- Introductory Comments
- Oral Presentations - HRD Visions
- Visions & Scenario Development
- Creating an Action Plan
- Action Plan Co-creation
- Action Plan Paper and Formatting
- Making the Action Plan Presentation
- Prep for HRD Final Examination
- Practicum Ideas

Session 3
- Introductory Comments
- Oral Presentations - HRD Action Plans
- HRD Final Examination
- Practicum Ideas
- PHE Comprehensive Examination
- Closing Presentation

Key
- 5 Absolutely Essential
- 4 Extremely Important
- 3 Somewhat Important
- 2 Nice to Know, But
- 1 Minimal Importance
- NA Not Applicable
Continuous Quality Improvement in Practicums

A practicum is a demonstration of the application of theory and research to a problem in the work context of a student using one of several problem-solving methodologies: research, evaluation, or development.

The idea for a practicum will usually evolve from work completed for a seminar. The Human Resources Development core seminar has a focus on the analysis of HRD in a student's work context (The REAL), and the selection of an HRD project with two components: (a) a vision (The IDEAL) for the project and (b) a multi-year action plan. The seminar should prepare each student with most, if not all, of the basic information necessary to complete all aspects of the practicum proposal. The Cluster Coordinator helps each student with "the practicum process" and format, sometimes with the help of the Local Research Associate.

A student who wants to maximize the effectiveness and efficiency of the process will follow several steps:

Tasks to Complete While Taking a Seminar
1. Identify problems in work context.
2. Match problems to core and specialization seminars.
3. Relate theory and research in seminar to problems.
4. Review the literature for papers in the seminar.
5. Discuss the idea with the seminar participants.
6. Discuss the practicum process with Cluster Coordinator.
7. Review Learning Activity Packages

Practicum Process
2. Read two or three practicum proposals by peers.
5. Read, then use the "Practicum Proposal Evaluation Form."
7. Read two or three Practicum Reports by peers.
8. Read, then use the "Practicum Report Evaluation Form."
9. Talk with Practicum Report authors and have a peer or two review the practicum report using the "Practicum Report Evaluation Form."

Following the above-mentioned steps will save time in the long run. Submit your Practicum Report with related items to the evaluator after you leaf through the report one page at a time and before inserting it into the envelope.

An evaluation of "Unacceptable" is usually attributable to two types of problems: (a) organizational and (b) format. A good problem statement will include the central issues and a description of the context in which the problem occurs. The issues should focus on "ENDS" such as enhanced student learning outcomes, greater access, or improved productivity.
The context could include governance, mission, accreditation and many other items such as primary programs, support programs, students, faculty, library-media center, student services, outreach programs, and administrative services. Two charts are included to help organize information in the report and to develop a conceptual framework for Chapter 5. After a researcher conceptually works the problem through the way the report will have to be arrayed, s/he will have a better understanding of resources to be gathered and analyzed and the procedures to be followed. Most of the format issues are carelessness. A "Title Page" provides a first impression, followed by the "Abstract" and the "Table of Contents." If the author of a practicum has difficulty with these three items, it is unlikely the other parts of the report will be of high quality.

Cluster Coordinators provide workshops to teach the practicum process. Each student is responsible for learning the practicum process. Evaluators are Judges. Evaluators provide feedback and may sometimes even suggest phrasing. Evaluators, however, are not editors or writers of reports.

All practicum reports must have high quality substance. The first practicum may pass with minor format errors. The progression in practicums should reflect Continuous Quality Improvement leading to a high quality scholarly 4th report.

Each student should begin to think about practicums at the outset. S/he should analyze context, internal and external, and identify problems and issues and match them with seminars. S/he should begin to develop a practicum proposal as soon as possible. Three students in the Orange County Cluster completed practicum proposals by the third session of HRD in the 1994 spring term; one student was enrolled in her first PHE seminar. Four students in the West Florida Cluster completed HRD practicum proposals by the end of the winter term in 1995 and four students completed HRD practicum proposals by the end of the spring term in 1995 (ED 372 239).

Since fall 1989, 264 HRD practicum proposals and/or reports have been submitted. Since June. 1994, 12 Computing and Information Technology (CIT) practicum proposals and/or reports have been submitted. Many outstanding practicum reports are available through ERIC. Some of the ERIC Document Resumes can be accessed through Electronic Library. Requests for documents can be processed efficiently through EL. Outstanding Major Applied Research Projects that may relate to practicums are also available through ERIC.

Warren H. Groff, HRD and CIT Practicum Evaluator, Fall 1995
Computing and Information Technologies Practicums

No date means "in process"

1. Carl Blakey Crowe, Emerging Technologies
   The Installation and Implementation of a Local Area Network at Wallace Community College Selma.

2. K. Kay Delk, Database Management, February 14, 1995
   Comparison of Students' Test Scores in Dbase IV as a Function of a Computer Tutorial versus Not Using a Computer Tutorial.

   An Evaluation of Graphical User Interfaces for the Extended Electronic Classroom.


6. Calvin L. Carpenter, Mg of Tech, Aug 13, 1995
   Development of a Survey to Assess the Telecommunications Needs of Leslie College Alumni.

7. Calvin L. Carpenter, Database Mg, Sept 7, 1995

8. Karen Hoblit, Database Mg, Nov 15, 1995
   Development of an Internet Users' Manual for Faculty at Victoria College.

9. Dan C. Jones, Database Mg.
   Development of Videotape to Provide VA Employees with an Orientation to the Internet.

    Development of a Strategic Planning Model for the Information Systems at Briercrest Schools.
11. Keith Potter, Computer Info Networks


12. Keith Potter, Database Mg, Sept 21, 1995


13. Tom Davis

Development of a World Wide Web Homepage on the Internet for Word of Life Bible Institute.

14. Stephan R. Reynolds

Development of an Institutional Policy for the Responsible use of Information Technology at LaGrange College.

15. James E. Barger

Development of a Questionnaire for the Certified Network Administrators Course.

16. Michael A. Lanser

Evaluation of the Computer Based Registration System at Lakeshore Technical College.
HRD PRACTICUMS
No date means "in process"

1. Norma M. McKinnon, Jan 21, 1991
Development of a Professional Activities Handbook Governing
Financial Assistance to Staff as Funded by the Title III
Grant.

Development of a Peer Collaboration Program for Faculty
Development Through Improved Communications.

Development of a Course/Instructor Evaluation Form...

The Design, Implementation, and Evaluation of a Professional
Development Workshop.

5. Dolores Yaschur, May 12, 1991
Development of a Document that Will Serve as a Working Plan
for the Implementation of an Employment Affirmative Action
Policy.

6. Weymouth Spence, October 21, 1991
A Cost Analysis Study of the Radiography Program at
Middlesex Hospital Using Shock's Model.

7. Jennifer Dowd, April 26, 1993
Development of a Faculty Search Committee Guide for Mercer
County Community College.

8. Ronald Williams, May 21, 1992
Improvement of Attendance Rates Through the Implementation
of a Student Tracking System at New York City Tech College

9. Walter A. Meyer (Did not complete)
Development of a Training Reference Manual for College
Faculty Who Train in Business and Industry.

10. Sherry A. Dunphy, March 18, 1993
Development of a Training Program for Cholesterol Screening
Personnel.
11. Robert D. Bolge, April 11, 1993
Development of a Plan To Make the Office of Institutional Research A Human Resources Development Utility at Mercer County Community College.

12. Elon W. Roach, April 11, 1993
Development of a Plan to Train Middle Level Administrators in Strategic Planning.

13. Pamela B. Farrell, February 24, 1993
Design for A Writing Across the Curriculum Faculty Retreat.

14. Anthony J. Mennuti (Did not complete)

15. Susan Ross Bell, June 26, 1991
Identifying Classroom Motivating Factors in the School of Business at Missouri Southern State College.

The Development of an Orientation Manual for New Part Time Faculty at Molly College.

17. Polly A. Schultz, August 25, 1991
Developing A Workshop To Train The Secretaries Employed By Villa Julie College To Use The Tab Feature In Wordperfect 5.1.

18. John L. Coleman (Did not complete)
Assessing the Morale of the Kansas City Missouri Police Department and the Need for an Effective Human Resources Utilization Program.

Development of an Orientation Program for Adjunct Health Administration Faculty at the University of Scranton.

21. Ronald Kopcho (Did not complete)

An Evaluation of Humanities Division Faculty Perceptions of the Need for a Multicultural/International Dimension in Curricula, Graduates, and Activities.

22. Andrew Niesiobedzki, Nov. 18, 1991

Development, Implementation, and Evaluation of a Workshop on Conflict Resolution for the Division of Arts and Letters at Manatee Community College

23. Ken James, February 27, 1992

Development and Validation of a Workshop on Basic Maintenance for Industrial Technology Education Instructors in Polk School Districts


The Development and Validation of a Strategic Human Resources Development Plan for the St. Petersburg Junior College Communications Program

25. Robert D. Head (Did not complete)

The Development of a Policy and Procedures Handbook for Music Faculty at Shaols Community College


The Development of an Orientation Manual And Video for New Employees of the Penn State Allentown Campus

27. Lucy E. Bartlett, February 18, 1992

Student Evaluation of Tutors: The Development of an Evaluation Form

28. Alberto L. Rodriguez (Did not complete)

The Development of a Faculty Handbook for the Assessment of Prior Experiential Learning

29. Ralph Gracia, January 24, 1991

The Development of a Training Program on Contract Audit Follow-up for the Defense Plant Representative Officer


The Development of a Staff Manual for the Admissions Intern at Adams State College
31. Carolyn Breen, October 28, 1993
Development of A Survey to Identify Stressors in the Supervision of Clinical Services at the University of Medicine and Dentistry of New Jersey

32. William P. Messier, January 3, 1992
Using the Preziosi Model to Determine Faculty Perceptions of Florida Memorial College

The Development of a Strategic Planning Model for Stillman College

34. Sandra F. McLendon, April 14, 1992
The Development of an Incentive Pay System for Use at Sue Bennett College

35. Susan Keen, December 16, 1991
The Development of a Competency Model for Professional Educators at Aetna Life and Casualty

The Development of a Culinary Teacher Preparation Guide for Production Kitchen Chefs at Johnson & Wales University

37. Frank G. Miglorie, Jr., March 3, 1992
The Development of a Trustee Handbook for the College of St. Joseph

38. John J. Conklin, June 30, 1992
The Development of an Articulation Plan for the University of Connecticut School of Social Work and Practicum Settings

39. Clarence M. Baskey, February 27, 1992
The Development of a Policy and Procedure Manual for Anchor Counseling, Inc.

40. William E. Boyer, March 18, 1992
Developing and Administering an Organizational Questionnaire to Simulator Instructors
41. James D. Dalton. April 27, 1992
The Development of an Employee Handbook for the Grove City Christian Child Care Center in Grove City, Ohio

42. George B. Wingblade, June 10, 1992
Development of a Service Guide Handbook for the Department of Physical Plant at Amherst College

43. Kenneth A. Carpenter (Did not complete)
A Survey of the Microcomputer Training Needs of Faculty of Greater Hartford Community College

44. Ester G. Pratt, July 13, 1882
The Development of a One Day Training Seminar on Intimacy and Relationships for Catholic Charities

45. Mehtap Scofield
The Development of a Guide for Planning a Turkish Language Lesson Plan at the Big Bend Community College

46. James Earl Taylor, January 30, 1992
The Development of Guidelines for Remediation of Speaking Anxiety

47. Steven L. Ray, February 28, 1993
Establishment of an Adjunct Faculty Professional Development Program at Palo Alto Community College

48. Gerry Oenbrink, May 12, 1992
The Development of a Training Program for Center for Psychological Studies Site Coordinators

49. Mark Kolodziej, September 11, 1992
Predicting Success in First Year Calculus: Traditional Classroom Versus Computer Managed Learning

50. Cathy M. Whitson, September 26, 1992
Development of a Survey Identifying Perceived Need for Basic Skill Training at Advanced Circuitry/Litton, Springfield, MO

51. Lisbeth Ceaser, March 29, 1992
The Development of an Inservice for Instructional Grouping in an Integrated Language Arts Classroom
52. Jenny Perry Horton, March 21, 1994
Development of a Manual To Assist With Support Services Delivery to Vocational Student Organizations and Special Populations in North Carolina

53. Napoleon Mills, July 8, 1992
Development and Validation of a Workshop on Basic Computer Operations For Vocational Shop Instructors at Manatee Area Vocational and Technical Center

54. Jane L. Forrest, January 4, 1992
The Development of a Teaching Excellence Strategic Plan

55. Ekow O. Hayford
An Analysis and Assessment of Classroom Management by Three Business Instructors of Stillman

56. Linda Schultz, April 18, 1992
The Revision of a Leadership and Management Curriculum to Incorporate Total Quality Management/Leadership Concepts For United States Navy Supply Corps Officers

57. Anita Mitzner, March 30, 1992
The Development of Team Building Seminars For Faculty at the Foothills Hospital School of Nursing

58. Christine D. Loftin, April 27, 1992
Identification of Specific Needs to be Met by an On-site Child Care Program at Okefenokee Technical Institute

59. Wayne Manning, July 8, 1992
The Development of a Faculty Development Plan for Panhandle State University

60. Jack R. Sexton, April 26, 1993
An Evaluation of the Early Alert Program of the Counseling Department at Paradise Valley Community College

61. Susanne K. Stark, April 27, 1992
The Development of a Procedure for Planning the Annual Workshop for Personnel Development at Hudson Valley Community College

Development of an Inservice Seminar for Faculty at Saint Joseph College of Nursing

63. Camilla A. H. Westenberg, March 18, 1993

Development of a Faculty and Staff Orientation Seminar for the Preparatory Resource Education Program.

64. Joan Crews, August 10, 1992

Student Evaluation of Psychology 100 Based on State Competencies


Design of a Questionnaire to Determine a Need for a Senior Citizen's Institute at Holy Family College

66. Wayne Manning (Same as #59)

The Development of a Faculty Development Plan for Panhandle State University

67. John Lester

Participants Perceptions Concerning the Effectiveness of Program Design for an Industry Based Provider of Continuing Medical Education.

68. Andrea Asha Rodriguez, December 21, 1992

The Development of a Comprehensive Supervisory Development Program for South Carolina State University.

69. A. Bibi Laurie, June 7, 1993

Development of a Humor Workshop for Instructors at Grande Prairie Regional College

70. Sharon Falzone, December 28, 1992

Development of a Plan to Facilitate Adoption to Management Change Required by Product Line Implementation

71. Clara J. Coleman, March 15, 1994

A Developmental Two-Day Self-Help Management Skills Workshop for Minorities
72. Sharon A. Martin, April 15, 1993

The Development of a Handicapped Student Services Manual for the Faculty of Wenatchee

73. Daryl L. N. Sutton, January 21, 1993

Development of a Preceptor Training Program in the Nursing Department at Los Angeles Pierce College

74. Debra S. McDowell, October 26, 1994

(CT)2: A Seminar on Current Trends in Clothing and Textiles

75. Dana A. Wilkie, December 9, 1992

The Development of a Training Manual for the Pace University Ambassador Organization

76. Jewel E. B. Euto, February 17, 1993

Development and Validation of an Instrumental Lifelong Learning Unit on Co-Dependency for Tri-County Rehab, Inc.

77. Michael K. Newman, December 2, 1992

The Development of a Survey Instrument to Assess the "Learning How To Learn" Knowledge and Skills of Adult Educators in the Department of Adult Education in Anderson County.

78. James T. Kushner, July 13, 1993

An Assessment of the Need for Professional Development of Adjunct Faculty at the Community College of Allegheny County North Campus.

79. Venda Raye-Johnson

The Development of a Career Development Workshop for Black Professionals Co-sponsored by Blacks in Management and the University of Missouri-Kansas City.

80. Gary D. Clark, February 8, 1993

The Difference in Knowledge of Substance Abuse Between Student Anesthetists Who Have Completed A Substance Abuse Workshop and Those Who Have Not

81. Al Infande, March 18, 1993

The Development of an Employee Handbook For Newly Hired Employees of Celebrity Cruises
82. Richard C. Bundsgaard

A Strategic Plan For Determining the Competencies Required in Desktop Color Electronic Prepress

83. Edward H. Lyle, February 1, 1993

A Comparison of Grade Point Averages Between High School Graduates and Non-High School Graduates at a Private Junior College

84. Shirley Schantz, May 27, 1994

Development of a Clinical Evaluation Tool for the School of Nursing

85. Lois Lund

Development of a Standardized Policy for Evaluating Experiential Learning

86. Terry Overlock, March 29, 1993

Assessment of Faculty Perceptions of Performance at Northern Maine Technical College

87. Samuel Neale, May 19, 1993

The Development of a Stress Management Program For Air National Guard Recruiters to Assess the Level of Burnout and Introduce Intervention.

88. Philip F. Janssen, October 28, 1993

The Development of a Framework for a Strategic Management Plan for American League Umpires

89. Judith Hatula, March 29, 1993

The Development of a Twenty-Hour Course in the English Language for the Tour Guides of a Telecom Museum

90. Howell F. Wright, December 29, 1993

The Development of a Handbook for Adjunct Professors on the Basic Concepts of the Profession of Human Resource Development.

91 Larry A. Bustetter, May 24, 1993

Development of a Workshop Designed to Enhance the Presentation Skills of Clinical Laboratory Instructors in a School of Medical Technology
92. Denise E. McDowell, January 30, 1995

The Identification and Dissemination of Information on Existing Educational Resources Within the Metropolitan Community College District

93. Dick Thompson, May 17, 1993

Development of a Standardized Written Pre-Flight Checklist for a PA 28-181 Aircraft

94. Gene Pease, July 21, 1993

A Survey of Training Characteristics of Sylvan Learning Systems Adult Educators

95. Josefa Garcia, Aug 4, 1993

Development of a Human Resources Plan for Gateway Community College Library

96. W. Dale Farley, March 18, 1993

Development of a Plan to Justify the Future Need for Human Resources Development at the Naval Aviation Depot

97. Hugo E. Edwards, November 26, 1994

To Develop An Entrepreneurial Program for Adult With Psychiatric Disabilities

98. Patricia A. Culbert, June 13, 1993

The Development of an Adjunct Faculty Handbook at Teikyo Post University

99. Claire Wadman, February 14, 1994

Development of a Support Staff Performance Evaluation System

100. Wendy E. Walker, December 1, 1993

Development of a Student Handbook for Adult Students at Dutchess Community College

101. Judith Metzgar, August 30, 1993

Development of a Resource Guide for the Teaching of Criminal Justice Writing

102. Norma Lugo-Irizarry, Completed, See #235

The Development of an Institutional Handbook For New Non-Academic Employers and Supervisors
103. Alan Algee, August 20, 1993
The Development of a Plan for Ministerial Training in Pacific Siberia

104. M. Bruce Pelkey, October 25, 1993
Development of a Faculty/Staff Guide for Assistance to Disabled Students at College of the Canyons

105. Cynthia E. Jolliff-Johnson, December 14, 1993
An Evaluation of the Effectiveness of St. Petersburg Junior College Policy Regarding Students on Academic Probation

106. Timothy H. Ricordati, January 23, 1994
The Development of a New Instructor Training Program for Part-time Practitioner Faculty Teaching Adult Students at a Graduate School of Management

107. James J. Lauria
Total Quality in the Classroom: A Comprehensive Review of the Literature

108. Marian P. Laufer, December 5, 1994
Development of Americans with Disabilities Act Program for Nursing Service at Community Hospital

Evaluation of a Faculty/Student Collaboration Model for a Professional Conference.

110. Kathleen P. Habel, October 28, 1993
Development of a Workshop to Train Part-Time Instructors of Community Educ. Classes for Adults at Broome Community C.

111. Mary J. Foley, January 18, 1995
The Development of a Mentoring Project for the Massachusetts /Rhode Island League for Nursing.

112. Chong-Sun Hong, March 29, 1994
The Development of a Policy on English Education at Hankuk Aviation University.
113. George A. Floyd (resubmitted as 204)

Developing, Planning, and Implementing a Staff Development Program at Shawnee Community College

114. David L. Jeselnik, March 28, 1994

The Development of a Marketing Plan to Publicize the Programs of the Chautauqua Center of Okaloosa-Walton Community College

115. Ernest J. Fleury, November 2, 1993

Development of a Program to Increase Solid Waste Disposal Awareness for Students at Johnson & Wales College of Culinary Arts

116. Ronald E. Carney, June 22, 1994

Analysis of the Demographic of the Three County Service Area of the Thomas Technical Institute for the Development of a Strategic Plan

117. Ching-Chieh Lien (Did not complete)

An Investigation of the Employment Situation of Recent Graduates of the Refrigeration and Air Conditioning Program at National Taiwan Normal University.

118. Margaret Haines, October 28, 1994

The Development of a Program to Improve the Retention at Brewton-Parker College

119. Gladys Diggs, December 15, 1993

The Development of a Grant Proposal to Expand the Substance Abuse Treatment Programs at the Amarillo Veterans Affairs Medical Center

120. Linda W. Swisher, October 28, 1993

Development of an Interactive Video for the Interview Process for a Nursing Program

121. Thomas G. O'Brien, December 19, 1994

Development of a Faculty Handbook for Science Faculty at Nassau Community College

122. Nancy Poretto, May 9, 1994

Development of an Academic Advisor's Handbook for Five Towns College
123. Darrel Morrow, January 18, 1995

An Evaluation of Selected Professional Development Activities and the Position of the Animateur at Red Deer College

124. Frederick Van Dusen, February 7, 1994

The Development of an Adjunct Instructor Handbook for the Criminal Justice Institute at Palm Beach Community College

125. Norman C. Hintz, March 14, 1995

Development of an Occupational Skills Improvement Academy for Northern Arizona University

126. Pearley Cunningham, September 16, 1994

The Development of a Faculty Development Workshop on Computer Access to the Internet

127. Beverly Lembo, December 23, 1993

Development of a Multicultural Resource Guide for Staff Development at William Davies Career and Technical High School

128. James C. Duncan, June 13, 1994

The Development of a Home Study Course on Stress for Navy Chaplains

129. Marie E. Cammarota, March 14, 1994

The Development of a Continuing Education Plan for School Nurses

130. Barbara B. Davis, December 13, 1995

Development of a Training Seminar on Diversity in the Workplace for St. Vincent’s College of Nursing

131. Lucille A. Flaaten, April 2, 1994

Proposal to Investigate the Relationship Between Time of Day and Results of Computerized Tests at Glendale Community College

132. Dana Tesone, August 10, 1994

Development of an Employee Handbook to Establish Basic Standards for Performance
133. Ronald J. Shearer
Development of a Profile of Television Sports Anchors

134. Phyllis Hunt
Development of a Comprehensive Plan to Improve the Work Envisionment of Calumet College of St. Joseph

135. Tony Corasaniti
Development of a Policy and Procedure Manual for the Internship Program at Franciscan University of Steubenville

136. Carolyn Dudgeon, April 21, 1994
The Evaluation of the Effectiveness of a Process used to Implement Professional Development in an International Health Sciences Project

137. Judith Vallery, January 17, 1995
Development of a Strategic Training Plan and Training Materials for Applicant Data Management Using Paradox Software

138. Susan L. Feldman
The Evaluation of the Prevocational Assessment and Curriculum Guide with other Assessment Instruments

139. Bernice Stokes, June 6, 1994
Evaluation of the Mental Health/Mental Retardation Contingency Management Program of the Chronic Care Unit at Georgia State Prison

140. Richard H. Hoffman, March 7, 1994
An Evaluation of the State Center for Community College District Voluntary Transfer Policy

141. William Lucci, Jr.

142. Walter J. Thielen, March 8, 1994
Development of a Questionnaire to Identify Causes of Speech Anxiety in the Human Communication Course at Paradise Valley Community College
143. Virginia D. Moody, June 6, 1994
The Development of a Total Quality Management Strategic Plan

144. Linda H. Phillips
The Development of Assumptions for Strategic Planning at Catawba Valley Community College

145. Sandra B. Crihfield, April 4, 1994
Development of an American History Unit Utilizing Videodisc Technology

146. Marcia Solomon, May 25, 1994
Development of a Continuing Education Program at Pierce College for Camp Nurses

147. Gregory Stiber, September 24, 1994
Development of an Internship Manual for the Master of International Business Administration Program for Nova Univ.

148. Larry McCarthy, June 9, 1994
Development of a Training Program for Tutors Engaged in Off-Campus Academic Support

149. William E. Anderson, June 30, 1994
An Assessment of the Minority Faculty Incentive Grant Program in Oklahoma

150. Tracey L. Smith
Assessing Lewis and Clark Community College's Part-Time Faculty Needs for Training and Development

151. Eleanor E. Conlin, February 21, 1995
The Development of a Prior Learning Assessment Handbook for Front Line Information Providers at Conestoga College

152. Richard C. Warner
The Development of an Adjunct Faculty Handbook for Lehigh Carbon Community College

153. Jerry Kellogg
Development of the Objectives, Content, and Instructional Strategies of a Workshop for Planning Decentralized Training Programs
154. Cecilia Borden
The Development of a Teaching Self-Assessment Portfolio and Guidelines for a Nursing Faculty.

155. Doug Jones
Improving Reading Proficiency Skills for At-Risk Students Through An Interactive Classroom Teaching Model.

156. Guy M. Nehrenz, May 9, 1994
Evaluation of the Orientation Program for Interns at Good Samaritan Regional Medical Center.

157. Melissa I. Blevins, August 12, 1994
The Development of a Survey Instrument to Assess Labor Market Needs for a Alcohol and Drug Abuse Counseling Program

158. Gerald R. Work, October 27, 1994
Developing a Training Program to Increase the Teaching Competency of Adjunct Instructors Teaching Tourism Curriculum at the Post Secondary Level.

159. Linda Austin Lutz, March 16, 1995
The Development of the North Carolina Information Highway Implementation Time Line at Catawba Valley Community College

160. K. Kay Delk, June 22, 1994
Development and Validation of a Faculty Resources Guide for Staff and Program Development at Seminole Community College.

161. Susan E. Rudasill, August 20, 1994
The Development of a Competency Based Instructor Assessment Instrument.

162. Ronald W. Berman
Investigation of Using State Funds to Subsidize Employee Training at Skill Dynamics, An IBM Company.

163. Delores Mixon Smiley, June 16, 1994
Development of a Multicultural Education Plan for Improving Climate and Mission Effectiveness at Siena Heights College.
164. Gregory Zimmerman, April 6, 1995

Physical Exercise to Control Stress: Perceptions of Selected General Motors-Saginaw Division Administrators.

165. Shirley Waterhouse, March 16, 1995

Development and Validation of an Intermediate-Level Faculty Seminar on Freelance Graphics.

166. J. R. Buchanan, June 16, 1994

The Development of a Part-Time Faculty Handbook for Florida Christian College.

167. Ernest H. Dammier, October 11, 1994

Evaluation of Computer Use By Faculty for Classroom Activities at Embry-Riddle Aeronautical University.

168. Larry Morriss, October 18, 1994

Development of a Handbook for New Faculty and Staff Members in the Engineering Technologies Division at Cincinnati Technical College.

169. Kenneth R. Schock

Development of a Sexual Harassment Policy and Procedures Manual for the West Valley/Mission Community College District in Saratoga, California.

170. Timothy M. Sullivan


171. Gaby N. Hawat, July 25, 1994

Development and Validation of an Adjunct Faculty Manual for the Electronics Engineering Technology Program at Valencia Community College.

172. Richard P. Smith, September 10, 1994

The Effect of Drug and Alcohol Awareness Training on the Number of Alcohol Related Incidents Among Students at Electronics Technician Class "A" School.

173. Mariettza M. Advincula-Carpenter, September 22, 1994

An Evaluation of the Human Relations Workshops and Training Programs
174. Bonnie MacGregor

Development of a Cassette Training Script for In-coming Calls at the Southtowns Campus of Bryant & Stratton.

175. Mark Goldstein, February 14, 1995

Development of a Plan for Reviewing Staff Job Classifications at College of Notre Dame.

176. Joan M. Steiner-Adler

Development of a Human Resource Development Project Plan for Eisenhower Medical Center Department of Pathology by Application of the Deming Method.

177. Gail J. Palmisano

Development of a Command Brief Video Storyboard for Fleet Training Center, San Diego

178. Jerrell Basile, September 1, 1994

Identification of Specific Needs to be Met by a Cosmetology Dispensary System at Okefenokee Technical Institute

179. David Edwards

Development of a Formal Training Program for New Administrators at Tarrant County Junior College

180. Joan Liverpool, March 5, 1995

The Development of a Model HIV/AIDS Junior Peer Education Program


Development of an In-Service Program Designed to Integrate Principles of Total Quality Management into Classroom Instruction.

182. Arland Kesterson

An Evaluation of College Facilities to Determine Compliance with the Americans with Disabilities Act (ADA).

183. Wendolyn R. Bennett, September 8, 1994

The Development of Recommendations to Increase Voluntary Inservice Participation of Escambia School Dist Teachers

Development of a Co-Curricular Transcript Program at Shenandoah University to Document Student Experiences for Outplacement Services.

185. Evelyn Isaacs, April 28, 1995

Development of a Questionnaire on the Implementation of World Health Assembly Resolutions on Nursing and Midwifery in Africa.

186. Charles R. Retts, September 16, 1994

Analysis of the Application of Frontline Service Training Concepts by Operations & Human Resources Services Employees

187. Steven J. Tourville, March 2, 1995


188. Michael R. Walter

Evaluation of the Human Resource Climate Within the Student Affairs Division at Paul Smith's College.

189. Rita Slator

Evaluation of a Career Exploration and Planning Workshop for Brandon Mental Health Centre's Service Workers.

190. Vicki Schoedel, June 28, 1995

Development of a Master Teacher Recognition Program for Concordia University Wisconsin's Adjunct Faculty.

191. Kathryn D. Pearson, November 18, 1995

Development of a Tutor Training Program for Math Lab Tutors at Arkansas Tech University.

192. Michael D. Hart

Development and Validation of an Adjunct Music Faculty Handbook for the University of Tampa.

193. Mattie Brown

194. Soon Nam Choi, April 26, 1995
Development of a Textbook Outline of Human Behavior and Social Environment for Social Work Class at Hanshin Univ.

195. Frank W. Hirsch, April 6, 1995
Identification and Analysis of Leader Communication Styles at Boeing - Corinth.

196. Fred Young
Planning for a Human Resource Development Strategy for the Faculty in the Career Department at Langara College.

197. Sarah Rodney, December 5, 1994
Evaluation of a Bridge Program Designed to Prepare High School Graduates to Pass the College Entrance Examination at Bethune Cookman College.

198. Nicholas M. Russo, April 27, 1995
The Development of a Questionnaire Survey for Graduates of the New Jersey Basic Course for Investigators

199. Joseph P. Linskey, June 22, 1995
Development of a Problem-Oriented Directed Patrol Plan for the Franklin Township Police Department.

200. Katrina Shelton, June 8, 1995
Development of a Manual for the Title III Professional Development Grant at Virginia State University.

201. Leroy Gilbert
Development of a Plan for Implementation of a Critical Incident Stress Debriefing Team at the United States Coast Guard Academy.

Development of a Training Philosophy for the Law Enforcement Officer Considering High Speed Police Pursuits.

203. James J. Stockton, April 1, 1995
Development of an Orientation Manual for the North Arkansas Community/Technical College Foundation Board of Trustees.
204. George A. Floyd (formerly 113)

205. Joseph A. Gavin
Development of a Workshop to Introduce Adjunct Faculty of the Community College of Allegheny County to Learning Styles

205. Phyllis Day Chief
Development of a Professional Development Activity for Faculty at Lethbridge Community College involved in Teaching Adult Learners.

Development of a Survey Instrument to Identify Continuing Education Needs of Assembly of Gcd Missionaries.

207. Guy M. Heath, March 5, 1995

208. Richard Schlesinger
Development of a Training Manual for the Counseling Office at Mississippi County Community College.

209. Rodney Dennison
The Development and Validation of an Integrated Approach to Measuring Organizational Productivity and Effectiveness at the Edison Community College Counseling Center.

210. Ronald C. Galliher
Development of a Professional Development Plan for the Blue Hills Regional Technical School.

211. Shirley M. Gantt, July 14, 1995

212. Michael A. Flemming
Development of an Orientation Program for New ADCOM Electronics Telecom Systems Group Employees.
213. Lucille A. Aloise
The Development of a Staff Development Workshop for Proposal Writers.

214. Robert Welling
The Development of A Faculty Professional Development Guide for Jefferson Davis Community College

215. Colin Murphy, Sept. 11, 1995
Development of Guidelines for the Creation and Use of Electronically Distributed Questionnaires at BMC Software.

216. Carolyn J. Rivard, November 9, 1995
The Development of an Orientation Manual for Teachers Covering the Obstetrical Department of Victoria Hospital.

The Development of a Recertification Process for Teachers at Southeastern Regional Vocational-Technical High School.

218. Howell K. Maughon, December 6, 1995
The Development of a Film Processing Cross Training Package for Equipment Field Service Engineers.

219. Sherrill Stone, June 22, 1995
The Development of a Strategic Plan for Integrating Learning Styles Instruction into the Curriculum of Marshall Technical School.

220. Arnold Kosmatka, November 9, 1995
Development of a Student Handbook for the Respiratory Care Practitioner Program at Crafton Hills College.

221. Karen Curtis, August 30, 1995
The Development of a Job Readiness and Employer Expectations Workshop for Adult Education Instructors

222. Karen Wray, June 8, 1995
Comparison of a Brief Personality Survey with the Myers Briggs Type Indicator (MBTI).
223. Lester Hardegree, June 11, 1995
The Development of a Presentation on Multimedia at Armstrong State College.

224. June Donaldson
Identification of Issues Which Create Conflict in Business Environments.

225. Kay A. Maize, June 22, 1995
Development of Registered Nurse Preceptorships for Bryan Memorial Hospital School of Nursing.

226. Donald R. Powers
Development of a Test to Measure Student Attitude Toward Learning at Orangeburg-Calhoun Technical College.

227. Kevin Driscoll
The Development of a Human Resource Development Plan for Air Force Reserve Officer Training Corps

228. Don Naber
Development of a Prototype Faculty Development Device Utilizing Environmental Scan Methodology

229. Charlotte Keck
Development of a Questionnaire for Evaluating the Orientation of Adjunct Nursing Faculty at Olivet Nazarene University.

230. Dustin Swanger, August 23, 1995
Evaluation of Rochester Institute of Technology's Energizing Quality Network Day.

231. Cheryl Ferguson

232. Sandra G. Martin
Development of a Handbook for Use in the Continuous Improvement Process at Providence Hospital.
233. Susan A. May
Evaluation of Fox Valley Technical College’s Recruitment and Admissions Processes in Providing Customer Services to Prospective Students.

234. Cindy L. Oberjoch
Evaluation of a Support Staff Training Workshop Offered By the New York State Financial Aid Administrators Association.


236. Lonzetta Smith-Allen
The Development of a Retention Plan to be Used by Tarrant County Junior College South Campus Counseling Center.

237. Stanley G. Percival
Assessment of Attitudes Toward Change Within The Faculty of Education at Nipissing University.

238. Florence F. Graham, December 27, 1995
Development of Learning Activities and Teaching Strategies for a History of Western Civilization Course for Developmental Students.

239. Douglas Ferguson
The Development and Design of a Model to Provide Clients the Strategic Planning Framework for the Introduction of Technology.

240. Ronald E. Dempsey
The Development of a Plan to Implement the Quality Process into the Federal Law Enforcement Training Center Strategic Plan 2005.

241. Lynn (Norman) Adams
The Development of Goals and Objectives for Computer Literacy and Proficiency at Bluefield State College.

242. Philip P. Hayden, December 27, 1995
A Comparison of Personality Factors of Law Enforcement Officers Related to Safely Executing Arrest Warrents
243. Sandra L. Castillo

Development of a Multiple Choice Test Construction Manual for the Associate Degree Nursing Instructors at Contra Costa Community College.

244. Elaine Halesey, August 13, 1995

Evaluation of the Organizational Climate at College Misericordia Using an Existing Human Resources Development Survey

245. Theodora A. Wieland

Evaluation of a Student Questionnaire Developed for Rowan College of New Jersey School of Professional Studies

246. Habiba N. Shaw

An Evaluation of the Effectiveness of the Helping Hand Newsletter in Barbour County, Alabama

247. Gayla M. Audia

Development and Implementation of an Employer Survey for the College of St. Francis

248. Sharyn Gibson

Development of a Guide for Faculty Teaching Students with Disabilities at Armstrong State College

249. Gloria Dawn Ramsey

Development of a Staff Development and Evaluation Program for the Office of Continuing Education at Southern College of Technology.

250. Joyce E. Martin, December 4, 1995

An Evaluation of the Human Resource Development Climate at East Central College.

251. Susan Catapano, December 26, 1995

Evaluation of a Faculty Orientation Program in a Child Care Center.

252. Danny Jones

Development Strategy to Improve the Human Resources Climate in the National Instructional Media Development Center.
A Description and Analysis of the Human Resource Development Climate at the Alberta Real Estate Association.

254. Patrece Jones
Development of an Effective Communication Program for the Area Systems Center.

255. Edi Lorenz
Development of an Orientation Checklist for New Part-time Faculty at the American College.

256. John Mowat
Development of an Employee Survey for Canbra Foods Limited.

257. John Masterson
Development of a Trustee Orientation Handbook for Allen County Community College.

258. Samuel T. Johnson, III
Development of a Questionnaire to Identify Factors Affecting the Attrition Rates of Junior Enlisted Soldiers.

259. Carolyn J. Ryals

260. Cynthia H. Marci
Needs Assessment of Training in the Office of Student Services at the School of Business and Entrepreneurship.

261. Susan F. Fairchild
Predicting the Success on National Standardized Nursing Examination Using Final Grades in Two Undergraduate Nursing Courses.

262. Uda M. Grant
Development of a Plan to Improve Communication of Adjunct Nursing Faculty.
263. Alexis P. Best

The Evaluation of Accounting Computer Software for Charitable Organizations.

264. Kenneth M. Schultz

Development of a Pilot Public Safety Service for the Williams Education Center of the Maricopa Community College District.

265. Charles A. Adimaro

Evaluation of the Mandatory Orientation Program for Newly Arrived Military and Civilian Personnel at Fort Dix.

266. Frederick L. Van Wert

Survey of Employee Attitudes Toward the Organizational Climate in the 37th Training Support Squadron's Faculty Development Flight.

267. Robert J. Kirchner, III

Development of an Operating Instruction for Military Training Managers and Instructors Assigned to the 335th Technical Training Squadron.

268. Mamie P. Tapp

Development and Validation of a Valuing Diversity Workshop for Managers of the University of Tampa.

269. Susan Edenfield

Development of Policy and Procedures for a Cooperative Education Component for the Armstrong State College School of Health Professions.

270. Gail M. Johnson

Evaluation of a Child Immunization Program as a Pediatric Community Health Project for Student Nurses at Helene Fuld School of Nursing.

271. Lee Paavola

Development of a Facilitators Guide to Adult Learning.

272. Young G. Kim

273. Jane C. Bravo

Development of a Training Course in Classroom Management for University of Alabama Instructors of Certificate Programs in Mexico City.

274. Chan-Bok Byun

Development of an Interpersonal Skills Training Program for Hotel Employees at Chodang University.

275. Anne Marie Renaud

Development of a Survey Tool to Assess the Level of Understanding of American Culture of the ESL Students.

276. Raymond J. Dubeau

An Evaluation of a Program to Improve the Employability of Social Assistance Recipients.

277. Cecil Holland

Development of an Orientation Plan for Certified Nursing Assistants in the Hiring Pool at Forsyth Memorial Hospital.

278. Nora Strasser

Evaluation of the Development Climate Among Friends University Faculty.
APPENDIX C

Creating and Sustaining Learning Communities Memos

Electronic classrooms were recorded and are available for all students to review. Recordings are not the highest quality, but they are a start. To access ecr recordings, behind the UNIX prompt, type cd "ecr/GROFFW and then hit "enter" or "return." The UNIX prompt should appear and you then type ecrt -p/MARP plus the other information.

Oct. 8    "    ecrt -p/MARP1.951008.
Oct. 23   "    ecrt -p/MARP2.951023.
Nov. 5    "    ecrt -p/MARP3.951105.
Nov. 19   "    ecrt -p/MARP4.951119.
Dec. 3    "    ecrt -p/MARP5.951203.
Dec. 18   "    ecrt -p/MARP6.951217.

To exit an ecr hit Ctrl c. To exit a classroom, hit Esc x. If there are technical problems, contact the HELP desk.

"Sustaining Learning Communities in the Digital Era" has taken on a life of its own. The last memo in December contain a list of research questions and issues of some of the advisees. Imagine the potential for growth over the next several months via TALK, NOTESfile, and ecrs.

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<tr>
<th>Student</th>
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Also, after a prospectus and/or a proposal is approved, the document can be available electronically. Phillip Davis has made his proposal available. You can access it as follows:

http://alpha.acast.nova.edu/~davisp
or
lynx http://alpha.acast.nova.edu/~davisp

* * * * * * * * * *

TECHNOLOGY

Technology is the primary vehicle by which institutions of higher education are going to re-engineer the teaching and learning process.

Robert C. Heterick, Jr., President, EDUCOM
The Chronicle of Higher Education
## Creating and Sustaining Learning Communities

<table>
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<tr>
<th>Date</th>
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<td>Prospectus, Conceptual Frameworks</td>
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<td>Synthesis and Formative Evaluation, Fall</td>
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</table>
COI Creating and Sustaining Learning Communities

Memo  Jun 1, 1995 Creating a Learning Community
Memo  Jun 29, 1995 Promoting a Learning Community
Memo  Aug 23, 1995 Starting Electronic Classrooms

An extraordinary era
NATURE AND SIGNIFICANCE OF THE PROBLEM
Prospectus, Proposal, Project, Report
Asynchronous Transfer Mode (ATM)
Gopher to Information - Learning Styles
Student Commands on the Electronic Classroom
Technology lists to anticipate the future
Conceptual Framework OD + HRD + TQC
Gopher through NSU
The Global Teenager

Memo  Aug 29, 1995 Prospectus, Conceptual Frameworks
Technology survey used by Cupples ED 372 277
Prospectus
Form to evaluate the prospectus
Proposal
Research questions
Conceptual Framework sheets to plan proposal
Christine D. Loftin’s summary
Changing Paradigms
Exemplary student HRD seminar papers
Advisees, projects, addresses, telephone numbers

Memo  Sept 2, 1995 Exchanging Information
Memo  Sept 4, 1995 What Is The Problem?
What is the problem
Conceptual Framework and Changing Paradigms
Development Problem Solving Methodology
Collaboration
Realistic Time Line
So, Where’s the IT Payoff?
God and Internet
Calling Washington D.C. - On-Line

Memo  Sept 8, 1995 What is the Problem Worksheets.
What are the issues worksheets
Research questions worksheets
Networked Multimedia

ECR  Sep 19, 1995 Problems, Issues, & Research Questions
Memo  Sep 19, 1995 Conceptual Frameworks
OERI Bulletin, Summer 1995
ISDN is newest high-tech need

ECR  Sep 24, 1995 What is the Problem
Memo Sep 29, 1995 Converting Proposal to Ch 1-3
Organizations and publications
Student progress information
Terry Overlock's changing paradigm model
NSF information and publications
NSF supercomputer centers
Coursework grants from Pittsburgh
NSF publications order form

ECR Oct 8, 1995 Converting Proposal to Ch 1-3

Memo Oct 10, 1995 Curriculum Formats
From proposal to Chapters 1-3
The changing education and training paradigm
HRD practicums with focus on technology
CIT practicums
U.S. Department of Education On-Line Resources

Memo Oct 16, 1995 Thinking Through the Project
Prospectus & Proposal through Project & Report
Ecr Recordings
Office of Technology Assessment
Exchange of information
RFP - USDE - OERI
Brian Satterlee's time line (ED 351 499)

ECR Oct 22, 1995 Converting Proposal to Ch 1-3

Memo Oct 26, 1995 Context and "Electronic" Lit Review
Electronic Lit Search for Agriculture
Exchange of Information and Publications
Grantsmanship
Ecr Recordings
Time Line for MARP

ECR Nov 5, 1995 Envisioning The Project

Memo Nov 11, 1995 Envisioning The Entire Project
Proposal - A Well Conceived Action Plan
- Thinking Through the Project
Oct 26 memo & Looking for Common Interests
Excellence in English and APA
Finger Command
Surfing to Resources
Ecr Recordings
Center for Computer and Information Sciences
Celebration
Chong-Sun Hong

ECR Nov 19, 1995 Envisioning The Entire Project
Memo Nov 24, 1995  Strategic Organizational Development
Technical College Model
Community College Model
Borderless and Seamless Solution Based Learning
Computer Based Online Learning

ECR Dec 3, 1995  The Project and Chapters 4 and 5

Memo Dec 7, 1995  Strategic Human Resources Development
Mission, Programs, People, and Technology/Know-How
Clarity in Priorities and OD-HRD Intervention
Strategic HRD via Mission Review & Vision Creation
Strategic HRD in Primary Programs
Curriculum to Produce Knowledge Workers
Content and Content Formats
Delivery Systems and Formats
Creating a Future in Content and Delivery System
Conceptual Framework for MARP by Phillip Davis
Primarily Content and Content Format MARP Projects
Primarily Delivery System and Format MARP Projects

ECR Dec 17, 1995  Co-creating A Vision Through TALK, etc.

Memo Dec 18, 1995  Synthesis and Formative Evaluation, Fall
An Excellence Blueprint - Governor Zell Miller
Gordon Moore - "By the year 2000...."
Analysis, Vision, and Action Plan (AVA)
Northern Arizona University, a "Communiversity."
Co-Creating Out Next Increments of Growth
Broad Social Issues
Formative Evaluation

* * * * * * * * * * * *

Vision
In 1981, Judith W. Leslie used Toffler’s The Third Wave to
develop an educational institution in an advanced technical
era dominated primarily by electronic media.
This methodology would allow the learner to proceed
at his/her own rate and style, within his/her own
time period, at his/her desired location, drawing
upon learning materials from throughout the country
and the world. Computer science and electronics
courses and programs of study would be an integral
part of the curriculum. Faculty would be cross-trained
in a variety of disciplines and teaching styles. They
would have flexible work schedules and loads and might
share an assignment with a spouse or colleague. Many
faculty would instruct from their home or electronic
cottage.... (Judith W. Leslie. "As The Third Wave
Approaches Higher Education: Planning For the Electronic
TO: Professionals at the MARP Stage of Degree Completion
FROM: Warren H. Groff
RE: Sustaining Learning Communities During the MARP via Electronic Classroom on Sunday, August 27, 7:00 CST
DATE: August 23, 1995

We are privileged to live during an extraordinary period. The developed nations of the world are evolving through an early technical era to an advanced technical era. We have greatly underestimated advances in science and technology. We have underestimated the competition resulting from the use of contemporary communication and information technology in the emerging global economy. We have underestimated the fundamental restructuring that is occurring and will continue to occur as various sectors of economies adopt wave after wave of increasingly complex and integrated technology to "add value" to goods and services. Professionals who have responsibility for education and training have an important role to play to help establishments adjust to a new era.

During spring 1994, I tried to "Create a Learning Community" (CLC) for professionals who were at the MARP stage of degree completion. Although a few examples of work were exchanged via mail, the CLC idea did not catch on because there was not sufficient commonality of interest in MARP topics and because we had only a few professionals online.

After eight new advisees were assigned to me in late May, followed by five additional advisees in June, it was logical to try the CLC idea again with memos on June 1 and June 29. The June 1 memo discussed the critical importance of "What is the problem?" The memo provided many sources of info, including former and current MARP advisees and their topics.

The June 29 memo provided information about (a) the quality movement -- the Malcolm Baldrige National Quality Award Program and the American Society for Quality Control, (b) the changing education paradigm with models by Branson and modified by Terry Overlock. Conceptual framework sheets were included along with a set of research questions.

Then, Virginia Moody sent a memo to the advisees assigned in the spring. Then, Pearley Cunningham sent a memo. Several e-mail messages led to Phillip Davis facilitating the first electronic classroom to discuss MARP ideas on Sunday, August 20. The ecr was very successful. Prospectus and proposal topics were discussed and topics were exchanged. Substance was discussed about the "Nature of the Problem." NATURE AND SIGNIFICANCE OF THE PROBLEM is critical. "What is the problem?" A good problem statement will focus on ultimate outcomes such as greater access to high quality programs, improved student learning outcomes, or enhanced quality of
life. The lack of a vision and multi-year action plan or a curriculum plan to use technology are contributing factors, but not sufficient for a good statement of the problem. Beyond "ultimate outcomes" ideas suggested in the June 1 memo, topics that could be used in the description of the work context include governance, mission, accreditation, primary programs, support programs, students, faculty, library & media center, student services, outreach programs such as continuing education - technology transfer, administrative services, and finances. The focus of the MARP project will determine the degree of emphasis on each of these items. Oscar Vazquez-Melendez indicated that Terry Overlock's proposal was excellent. Format ideas were discussed during the ecr. Practicums have at least two purposes (a) to learn problem solving methodologies for areas of interest in a professional's work context and (b) to learn format. I have yet to see a practicum or a MARP prospectus or proposal that has real substance if the writer does not comply with format mandates. How can a document represent higher order cognitive problem solving thinking if the mechanical format items are not right? The 4th edition APA - PHE guidelines go into effect with the October term. If proposals are approved by the end of September, then MARP reports can be written using 3rd edition APA.

A second ecr will be help on Sunday, August 27, 7:00 Central Standard Time (CST) in classroom 2. Type ecr 2 at Unix prompt. A set of student commands is attached.

Articles can be shared during all four stages of the MARP process (a) prospectus, (b) proposal, (c) project, and (d) report. Human resources development system of the future will be based on a better understanding of how the mind functions and on technology. The July 17, 1995, issue of TIME contained "Glimpses of the Brain," pp 44-52. "On the Edge of the Digital Age" was a four part series on June 4, 11 18, and 25 in the Star Tribune. The series can be purchased for $5.50 from the Star Tribune, 425 Portland Ave., S., Minneapolis, MN 55488. Articles may be useful to exchange. "Are You Ready for the Desktop of the Future? appeared in the June 1 issue of Datamation. If you exchange articles, be sure to include ALL citation information.

Professionals in PHE are in the HUMAN RESOURCES DEVELOPMENT business. Never before have professionals in education and training been faced with challenges and opportunities like we are today. Human and technological communications systems consist of phases (a) input, (b) process, and (c) output. How do we begin to use information about how the mind functions more effectively in our establishments? How do we use learning styles during the input and process phases? How can planning preferences be used in the output phase? How do we raise the level of awareness and understanding of advances in science and technology and (a)
anticipate when and where the content information should be placed in K-16 curriculum and (b) how they should be used in the delivery of a borderless and seamless learning continuum with authentic evaluation? The June 29 memo made mention of asynchronous transfer mode (ATM) technology. Attached are two slides with a list of technologies. There are 36 corporations producing ATM that belong to the ATM Forum and hundreds of corporations that are using it for distance education and training. North Carolina is deploying ATM in schools and colleges. How will ATM evolve over the next five years and how will it be used? How will other technologies evolve? The lists do not include technologies being developed through the Advanced Technologies Program (ATM) and or developed by the private sector. What are good research questions for a MARP about technology? What are good research questions about the implications for HRD? What procedures should be followed to develop a technology intensive distance delivery system with organizational and human resources development components? See attached strategic planning and action plan diagrams.

You can Gopher to information. Attached are two sheets to help you access selected states. St. John’s University is the home of the Learning Styles Network. You can access a great deal of work by Rita and Ken Dunn. Also, you can access a really good newsletter by Holly Jobe via MCIU-6.

Judith Hatula has finished her "Outstanding" report The Creation of a Human Resources Development Program to Affect Change in Attitudes of Telecommunications Personnel to Improve Customer Service. Judith will return to Finland. Please congratulate her and wish her well by call or card. Dr. Judith Hatula Returning on Sept 2 to:
3305 Danzig Place Liisankati 15 E 30
Alhambra, CA 91803 Helsinki, 00170 FINLAND
213-221-0083 011-358-0-135-2260
Judith completed her project for Telecom Finland which made a major transition from the public sector to the private sector accompanied through modernization and restructuring. Judith will return to Finland as an adjunct faculty member.

The original intent of "Sustaining Learning Communities" was to provide a way to facilitate interaction between students who have interest in similar topics at the prospectus and proposal stages. This memo is being sent to all advisees assigned to me as well as a few who have asked if I would be their advisee. "Building Learning Communities" included nine years of research within two PHE seminars (ED 351 499). "Creating and Sustaining Learning Communities" consisted of seven years of research about two leadership seminars which begin and conclude a three year doctoral program. Some of that research is available through ED 352 126 & ED 372 239. We shall pioneer the next increment of growth -- SUSTAINING LEARNING COMMUNITIES at a MARP STAGE DURING the DIGITAL AGE.
Student Commands on the Electronic ClassRoom
- ECR 6.10
Copyright (C) 1986, 1987 by Don Joslyn, Nova University

Commands:

<Esc> * a = Ask Question
<Esc> x = Exit Class
<Esc> y = Answer Yes
<Esc> n = Answer No
<Esc> 1 thru <Esc> 9 = Answer Multiple Choice
<Esc> ? = Answer "Do Not Know"
<Esc> c = Run course (choice of 7 topics)
<Esc> t = Run Tutorial
<Esc> d = Dump BlackBoard to Unix file
<Esc> D = Dump Screen to Unix file
<Esc> p = Prepare question
<Esc> w = Write prepared question on window
<Esc> m = Write Unix file on question window
<Esc> <Space> = Write next page of Unix file
<Esc> / = Change current working directory
<Esc> <Esc> = Clear Help line
Control e = Erase entire student display window
Control l = Redraw screen
Control u = Erase the line you are on

* On some computer systems, you do not have to hit the Esc
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**Asynchronous Transfer Mode**

**Audio Editing Packages**

**Cellular**

**CD Rom**

**Desktop Conferencing**

**Digital Video Everywhere**

**Document Conferencing**

**Integrated Services Digital Network**

**Multimedia**

**Personal Digital Assistant**

**Smart Technologies**

**Teleconferencing**

**Videoconferencing**

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**TECHNOLOGY**

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**Audio Video Interleave**

**Cellular Digital Packet**

**Computerized Facial Recognition**

**Digital Convergence**

**Distributed Digital Video**

**High-End Portables**

**Mobile Computing Solutions**

**Pen Input**

**Realtime Open Systems**

**Ubiquitous Computer**

**Universal Mailbox**

**Wireless PC to Watch**

**Workgroup Collaboration**
STRATEGIC THINKING: MAXIMUM SYNERGISM =

LEADERSHIP THROUGH

OD + HRD + TQC

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MULTI-YEAR PLAN
Gopher Through Nova Southeastern University

mmunix
1. Internet Menu
2. Internet Tools (Hytelnet, Archie, Gopher, Inter-Links)
3. Gopher/
2. University of Michigan/
8. gophers/
4. United States/

11. Florida
8. Embry-Riddle Aeronautical University/

12. Georgia
10. Georgia Department of Technical and Adult Education/
13. Georgia Tech/
20. Southern College of Technology/

20. Louisiana
26. Mississippi

35. North Carolina
17. North Carolina Community College System/
27. University of North Carolina at Greensboro/

40. Pennsylvania
6. CHESCO NET/
35. Montgomery County Intermediate Unit Gopher Server/
1. About Montgomery County Intermediate Unit
2. More information about the MCIU, IUs and Districts/
3. Calendar of upcoming Events, workshops, conferences, etc/
4. MCIU Online Resource Center/
5. MCIU Projects/
6. Interface: MCIU Education Technology Newsletter/
7. Libraries/ Research on the Internet/
8. Selected Resources for Educational Administrators/
9. Selected K-12 Educational Resources by Subject/
10. Areas of General Interest/
11. Gopher Servers Worldwide by Geographic Location/
12. Searching the Internet (Veronica, Archie, Jughead)/
13. WAIS-based Information Searching/

42. South Carolina
2. Clemson University CQI/TQM Gopher/
4. Clemson University/
7. College of Education at Clemson University/
8. Greenville Technical College, Greenville, SC, USA/
14. University of South Carolina/

51. West Virginia
THE GLOBAL TEENAGER
Holly M. Jobe
Editor

While I was trekking in the Himalayas of Nepal last fall, I was struck with how "Westernized" the sherpas and people I met along the way were. I had traveled half way around the world to escape our dominant culture; to experience another lifestyle but was faced with sherpas in blue jeans and stylish running clothes. I had hiked for twelve days high into the mountains only to find posters of Bruce Lee and Arnold Schwarzenegger in an inn with no electricity and minimal amenities. I was disillusioned and was personally experiencing the "Global Teenager" phenomena described by Peter Schwartz, in his book, The Long View.

Schwartz is a futurist who specializes in tracking demographic, technological, economic, political and environmental trends and develops possible future scenarios based on these trends. He predicts, barring plague or famine, that by the year 2001 there will be over 2 billion teenagers in the world. Like the baby boomers of the 1960s, he expects that they will have a major impact.

Already, young people around the world manifest a global culture which includes the ubiquitous walkman, sport clothes from Benetton, Ralph Lauren and Esprit, movies, music, and MTV. Technology is changing rapidly and is moving towards richer, easier communications devices such as faxes, electronic mail and soon broadband-width videoconferencing networks. The costs of these technologies are decreasing and families from established middle classes in many third world and affluent countries will be able to purchase computers and high technology items like we purchase calculators today.

These tools will make it possible for teens to communicate with each other easily; perhaps, as Schwartz suggests, have an electronic "date" with someone half way around the world. He envisions a place that may be called the "video cafe" where youngsters could "meet" other like-minded teens. We already have the rudiments of this in FrEdMail and SCHLnet (in the Usenet section of the MCIU internet main menu). One of the newsgroups is "Kids Cafe" where students can electronically meet others from around world.

From what Schwartz and his colleagues suggest, this trend is inevitable. "These global teenagers will have a sense of identity with their generation: as blue jeans were the universal style of the sixties, the styles of Benetton, where colors change but patterns remain the same, suggest a cultural uniform." These youngsters will have a very high technological awareness (remember, these are the kids that we're asking to program our VCRs!) And, they will have a more global identification than their parents, they will embrace peers from other countries.

What implications do these "inevitable" trends have for education? Where do schools fit in? Can we help prepare all students, not just those privileged children of high tech, affluent parents. All students will need a head start in understanding and using the tools of the world?

The "Global Teenager" is real, even in the dusty, crowded, ancient city of Kathmandu. Close to the roof of the world, there is a United Colors of Benneton store. Since it is expected by some, that these estimated 2 billion young people will have more of an impact on the world than the post World War II baby boomers, they must be prepared to lead us into the 21st and 22nd centuries.
32. New Jersey

5. Educational Testing Services/
   1. About this Gopher/
   2. What's New on the ETS Gopher (updated 4/14/95)/
   3. About ETS/
   4. Quick Test Finder/
   5. Tests and Services/
   6. Computer Based Testing (CBT)/
   7. The ETS Presidential Series/
   8. Policy Information Center/
   9. Employment Opportunities at ETS/
  10. Other Educational Services/

34. New York

82. St. Johns University, Jamaica, NY/

1. About the SJU Internet Gopher
2. SJUinfo - St. John's U Campus-Wide Information System/
3. What's New on the SJU Gopher/
4. Search for a Subject in Gopher-space/
5. Disability and Rehabilitation Resources/
6. Education and Training Resources/
7. Groups and Organizations/
8. SJU Listserve Archives and Listserve Data Files/
9. Information by Discipline (Subject)
10. Network Information Services (Gopher/WAIS/WWW/etc)/
11. Network Info, Software, and Resources/
12. Software (CMS, ICP/IP, Kermit, IBM Link, etc.)/

5. Education and Training Resources/
   1. Grants and Funding Information/
   2. The Princeton Review <
   3. FYI Elementary and Secondary Education Users FAQ/
   4. Why we use the Internet/
   5. Learning Styles Network (St. John's University)
   6. Electronic Resources for Adult/Distance Education/
   7. Mailing Lists for K-12 Educators (at CNIDR)/

5. Learning Styles Network (St. John's University)
   1. Rita Dunn Answers Questions on Learning Styles/
   2. Bibliography - Dunn & Dunn Model (Aug 94)(?)
   3. Bibliography - Dunn & Dunn Model/
   4. Learning Styles Network Newsletters/
   5. Abstracts (June 93)(?)
   6. Abstracts/
   7. Papers and Articles/
   8. Conferences and Transcripts/
   9. Textbook Extracts/
The second ecr on "Sustaining Learning Communities" was a great success. Eight participants discussed numerous items. There is similarity between several of the MARP topics. A request by one student for information about surveys yielded several responses; additional information will be exchanged electronically and in hard copy. A technology survey used by Dr. Mike Wayne Cupples is in ED 372 277.

It is possible that several "Learning Communities" will form based on (a) MARP stages (prospectus, proposal, project and report) and/or (b) MARP topics.

**Prospectus.**
A prospectus is a concise statement about a problem of keen interest to a student that occurs in her/his work context. The key issue is "What is the problem." A researcher must understand the problem and the context in which it exists as a prelude to formulating good research questions. Research questions suggest the bodies of research that should be analyzed and synthesized in the proposal and in the report.

Continuous quality improvement (CQI) was built into the practicum process to assist each student attain higher levels of research and scholarship in each of the four practicum reports. A CQI statement for the practicum process lists tasks a student should complete while taking seminars and steps to take while working on practicums. Conceptual framework sheets were developed to help a student think through each aspect of the project (see attachment). An understanding of guidelines, resources, and tools was required. Reading a few practicum proposals and reports was essential. These same principles apply to the MARP process. In the process of completing seminar papers and practicum proposals and reports, each student should acquire (a) competencies in research and scholarship and (b) skills in APA-PHE form and style and presentation to yield effective and efficient results. **QUALITY is the important criterion.**

After a first full draft of a prospectus has been written, a student should analyze it critically several times. Is the title a clear concise statement of the project? Does the title page meet APA-PHE form and style? How does each paragraph contribute to a better understanding of the project? I wrote a 10 page proposal earlier this month. Paragraphs I wrote the first day were critically evaluated
the second day and so on throughout the week. My wife reviewed the paper several times and we discussed details.

Practicum report evaluators use forms to pass judgement on a document. You can evaluate a prospectus in a similar way:

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<th>Form to Evaluate Prospectus</th>
<th>Excellent</th>
<th>Good</th>
<th>Rewrite</th>
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<tr>
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The document should be rewritten if it does not represent the best in research and scholarship and does not comply with form and style.

A student can write an excellent prospectus the first time and have it authorized for distribution to the committee members or the prospectus can go through from 3 to 5 rewrites and consume energy, money, and time. Advisees who are online can send their drafts electronically to others for critique. However, DO NOT send documents to me electronically until we have academic policy guidelines. Practicum report evaluators and MARP advisors provide feedback but they are not editors for form and style.

After the major advisor has authorized the distribution of the prospectus to the committee, a student can prepare to elaborate on various aspects of the prospectus. S/he can include these ideas either in the next rewrite of the prospectus or in the proposal if the topic is approved.

Proposal.
Authorization by the committee permits a student to proceed with the idea to the proposal stage. Authorization to develop the proposal means that the idea has sufficient merit and can ultimately meet the scope requirements of a MARP. The MARP process parallels the practicum process.

Comments by the three committee members must be considered.

Authorization by the committee provides the opportunity to delve in depth into each aspect of the proposal beginning with a very clear focus on the "Nature and Significance of the Problem." Each of you has responsibility for education or training for HUMANS that occurs in a CONTEXT – business and industry; government and the military; health care and promotion; and institutes, schools and colleges. Curriculum has three formats (a) content format, (b) delivery system format, and (c) evaluation format. What are the needs of
employers? What are the needs of the consumers? How well does the content meet the needs of employers or consumers? What are the alternative formats for organizing curriculum - free standing disciplines such as math, science, and technology or an interdisciplinary format? What are the alternative ways to deliver the curriculum - contemporary traditional, partial technology, technology intensive? What are the alternative ways to authentically measure high quality world class student learning outcomes - standardized tests, portfolio, or problem/solution based observations? The North Carolina Information Highway project involves the deployment of asynchronous transfer mode (ATM) technology in schools and colleges to move toward "full service" education on demand. The International Community College will make extensive use of technology and pioneer alternative delivery systems. Fundamental restructuring will occur.

Following clarity in the "Nature and Significance of the Problem," it is appropriate to review research questions and possibly rewrite them based on new insights. Clarity of the problem should help to identify bodies of research which should be analyzed and synthesized in the literature review.

Resources are available to help in proposal development. Christine Loftin began to envision a wholistic approach to her program during her second seminar. Chris envisioned her professional development plan by her fourth seminar and the tasks to be worked on in the seminars and practicums to lead to the Development of a Strategic and Operational Plan for a Full Service Community Family Center for Training Purposes at Okefenokee Technical Institute, GA (see attachment). Chris and her proposal and MARP report are available. Terry Overlock was impressed with Chris’ approach and followed a similar pattern based upon Branson's changing education and training paradigm (see attachment). Terry and his proposal are available, as are many peers working on similar topics. Exemplary seminar paper by peers may be useful (attachment).

A proposal can be reviewed with an evaluation form. A form could be developed to evaluate various MARP stages.

Research Questions For Which We Can Provide Direction.
Several issues for which our group can provide direction include (a) What content and process needs will all or most advisees have who are at various stages of the MARP process (prospectus, proposal, project, report)? (b) What aspects are unique to each student’s project? (c) What technologies are available to assist professionals and how can they be used effectively (like electronic library)? (d) What are the academic policy guidelines relative to collaborative distance learning online? (e) How can professionals working on relevant practicums become involved in the process?
## Conceptual Framework

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## CHAPTER 5

### DISCUSSION

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CHRISTINE D. LOFTIN

Loftin, a graduate of PHE’s Ed.D. program with a specialization in vocational, technical, and occupational education, is the Child Development program instructor at Okefenokee Technical Institute in Waycross, Georgia. This project was her MARP.

Development of a Strategic and Operational Plan for a Full Service Community Family Center for Training Purposes at Okefenokee Technical Institute

Descriptors: Human Resources/Training and Development; Technical; Strategic Planning; Child Care Professionals

Numerous issues will be important in the next decade. No issue will be more significant, however, than how we focus resources on children, families, and the training of early childhood and family service professionals. The design for implementation of the strategic and operational plan will enable the center to responsively embark upon a profound shift of reconfigured services that support families and prepare early childhood and family service professionals to fulfill service needs.

The rationale for the full service community family center plan for training purposes included (a) the alarming trends in child and family health; (b) the ever-increasing stress on family life; (c) the lack of high quality, comprehensive services for children; (d) the program quality threatened by lack of resources and standards; and (e) the fragmented service delivery.

Three major conclusions were drawn: (a) the conceptual framework which includes the organizational development, human resources development, and evaluation components must be implemented in concert with each other; (b) the output of quality trained early childhood and family service professionals is dependent upon the implementation of a properly designed full service community family center; and (c) implementation of the full service community family center should meet the current needs of the community within the OTI service area.

Three major recommendations were made: (a) the strategic and operational plan for the full service community family center for training purposes at Okefenokee Technical Institute must be implemented as soon as possible; (b) continuous integration of services is essential; and (c) successive evaluation of the organizational development, human resources development, and evaluation components must take place.

********

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Ross E. Moreton, Ed.D., Central Staff Committee Member

Cluster: Tampa

Programs for Higher Education

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CHANGING PARADIGMS

CURRENT PARADIGM

Experience

Knowledge

Teacher

Student

Student

Technology-Based Paradigm

Experience

Knowledge

Teacher

Knowledge Database
Communications
Learning Management

STUDENT

STUDENT

Experience

Knowledge

Experience

Knowledge

Note: Adapted from Center for Educational Technology, Florida State University (1992)
Exemplary Student Work, 1993-94

South Florida Cluster - ED 371 164
1. Strategic Planning and the Role of Human Resource Development at Nova University - G. Stiber
2. The Development of a Plan to Design and Deliver Programs Based on Client Needs Assessment for the Center of Hospitality Management at Nova University - Dana V. Tesone
3. A Model for Faculty Development in Occupational Therapy - Pamela K. Shaffer
4. The Need for Teamwork Training for Faculty and Staff at the Postsecondary Level - L. Pickard

Phoenix Cluster - ED 372 185
1. CAE-LINK Training Operations Strategic Action Plan - Steven J. Tourville
2. Central Training Academy Human Resources Department Plan of Action - James R. Frazier
3. The Creation of Functional and Discipline Specific Remote Computer Labs for the Implementation of Computing and Information Technology Across the Curriculum at Chandler-Gilbert Community College - Wayne G. Gautreau

Tampa Cluster - ED 372 277
1. An Instructional Plan for Staff at Sarasota County Technical Institute on the Americans with Disabilities Act of 1990 - Pamela Bull LaGasse
2. Human Resources Development Plan for Hillsborough Community College - Sherry L. Kersey
3. Action Plan to Implement Technology Seminars at Embry-Riddle Aeronautical University - Shirley Waterhouse
4. Expanding the Technology Horizons at Florida Community Col at Jacksonville - Margaret Dooley
5. Five-Year Action Plan for Nova University's Programs for Higher Education (PHE) to Require Personal Computers - Robert W. Hill

Glossary: Human Resources Development

Orange County Cluster - ED 372 239
1. Development of a Vision for Communications in a Total Quality Training Facility, Fleet Training Center, San Diego - Gail J. Palmisano
2. Development of a Video Training Model to Increase Reliability of Neonatal Instructor Grading at Crafton Hills College - Arnold L. Kosmatka
Advisees for Major Applied Research Project (MARP)

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James Corbett
Chong-Sun Hong
Terrence Overlock
Marvin L. Smith
Althea Stevens
Katherine Williams

Winter, 1995
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Norman C. Hintz
Simin Shizadi
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Spring, 1995
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MAJOR APPLIED RESEARCH PROJECTS

Program Review - Dr. Brian C. Satterlee, 1991

"The Development, Implementation, and Evaluation of a Model for the Review of Associate in Science Degree Programs" consisted of three phases: protocol development, test of the protocol, and evaluation of the pilot test.

Strategic Planning - Dr. Steven B. Dowd, 1992

"Development of a Future-Based Strategic Plan for a Radiography Program."

Human Resources Dev. - Dr. Michael Wayne Cupples, 1993

"Workforce Education and Training Requirements for Communication and Information Technologies at the United States Army Aviation Center."

Strategic Planning - Dr. Niann-Chung Tsai, 1993

"A Strategic Plan for Nontraditional, Off-Campus, Bachelor's Degree-Completion Programs at the World College of Journalism and Communications" (Taipei, Taiwan).

Strategic Planning - Dr. John J. Conklin, 1993

"The Development of Strategic Plans for Implementing Distance Education in Social Work Education."

Human Resources Dev. - Dr. Sarah Simpson-Ussery, 1993

"The Development of a Comprehensive Inmate-Specific Curriculum Model."

Strategic Planning - Dr. Robert W. Collins, 1993

"A Handbook on Strategic and Operational Planning for Chairpersons at Chabot College."

Human Resources Dev. - Dr. Keith Ellen Ragsdale, 1994

"The Development of an Articulated Design to Facilitate Entry of Emergency Medical Technician-Paramedics Into the Nursing Profession."

Human Resources Dev. - Dr. Polly A. Schultz, 1994

"The Development, Implementation, and Evaluation of a Plan to Revitalize the Administrative Assistant Curriculum at Villa Julie College."
Human Resources Development - Dr. Christine Loftin, 1994

"Development of a Full Service Community Family Center For Training Purposes at Okefenokee Technical Institute."

Strategic Planning - Dr. Yng-chien Shue, 1995

"The Development of a Strategic Plan to Establish a Printing Technology Department for National Taiwan Normal University, Republic of China" (Taipei, Taiwan)

Human Resources Development - Dr. Richard Pullen, 1995

"Development of a Training Program for Interpersonal Competencies in the Caring Difference Program at Northwest Texas Healthcare System."

Human Resources Development - Dr. Judith Hatula, 1995

"The Development of a Plan for Implementing a Program to Affect Changes in Attitudes of Telecommunications Personnel to Improve Customer Service" (Helsinki, Finland)

Total Quality - Marvin L. Smith

"Development of a Quality Improvement Plan for Air Traffic Control Training at Embry-Riddle Aeronautical University."

Human Resources Development - Carolyn Breen

"The Effect of a Career Education Program on the Perceptions of High School Students Concerning Dental Assisting as a Career Option."

Human Resources Development - Dr. Alan Algee, 1995

"The Development, Implementation, and Evaluation of a Model for Teaching Intercultural Competency Through the Content Areas at Faith School of Theology."

Total Quality - Ronald E. Carney


Human Resources Development - Katherine Williams

"Renewal of the Legal Secretary Certificate Program at Moultrie Technical Institute."
Plan for Multimedia - Terrence H. Overlock, Sr.

"A Multi-Year Plan for the Utilization of Multimedia Technology at Northern Maine Technical College."

English Education - Chong-Sun Hong

"An Action Plan for the Use of Innovative Approaches in English Education at Hankuk Aviation University" (Korea).

Technology Education - James E. Corbett

"The Development of a Modular Technology-Based Curriculum for Exploratory Agricultural Education at Lowndes Middle School."

Open Learning Center - Kenred Allen Christian

"An Open Learning Center: A Model for the College of Arts, Science, and Technology" (Jamaica).

Multimedia HRD - Althea Stevens

"The Development of a Distance Learning Course for the Computer Science/Computer Information System Curriculum Using Multimedia Presentations."

Gown-Town HRD - Norman C. Hintz

"A Plan for the Improvement of the Town-Gown Relationship Between the Community of Flagstaff and Northern Arizona University."

Curriculum, HRD - Judith Vallery

"Responsive Evaluation of the Implementation of Teaching Core Nursing Concepts" at Baptist Memorial Hospital System School of Professional Nursing.

Strategic Planning - Robert E. Freeman

"The Design and Development of a Strategic Planning Model for the Continuing and Extended Education Division of Fuller Theological Seminary."

Technology & HRD - Shirley Waterhouse

"Development and Validation of a Plan for Implementing Faculty Educational Technology Resource Services at Embry-Riddle Aeronautical University."
Enrollment Management - Simin Shirzadi

"Enhancement of Student Learning Through An Effective Enrollment Management Plan at Ivy Tech State College."

Human Resources Development - Richard Celeste

"A National Model Addressing the Major Components of a Police Recruit Training Program to Include the Underlying Philosophy of Such a Model."

Multimedia - Phillip L. Davis

"A Multimedia Modem Course Development Project for Del Mar College."

Human Resources Development - Virginia D. Moody

"Development of a Strategic Plan to Offer an Accredited Doctoral Program for Professional Federal Employees at Brooks Air Force Base."

Human Resources Development - Oscar Vazquez-Melendez

"Development, Implementation, and Evaluation of a Model Distance Learning Curriculum in Spanish to Prepare Hispanic Migrant Farmworkers for the General Educational Development Tests."

Tech Prep, HRD - Ruth Ann Winchester

"The Development, Implementation, and Evaluation of a Model for a Tech Prep Business Curriculum for Henry County School System."

Strategic Plan for Technology - Pearley Cunningham

"The Development of a Strategic Plan to Provide a Multisite Electronic Engineering Technology Program at the Community College of Allegheny County."

Human Resources Dev for Technology - Robert D. Bolge

"Creating a Strategic Faculty Development Paradigm to Assist Faculty Members in Mastering the New Communications Technologies at Mercer County Community College."

Strategic Plan for Technology - Karen E. Hoblit

"Development of a Strategic Plan for Integration of Computer Technology Into Instruction at Victoria College."
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Leawood, KS 66209
913-451-1049
TO: MARP Advisees
FROM: Warren H. Groff
RE: Sustaining Learning Communities During the MARP via Electronic Classroom, Sun, Sept 10 & 24, Rm 12.
DATE: September 2, 1995

Last year I tried to "Create a Learning Community" (CLC) for professionals who were at the MARP stage of degree completion. Although a few examples of work were exchanged via mail, the CLC idea did not catch on because there was not sufficient commonality of interest in MARP topics and because we had only a few professionals online.

After 12 new advisees were assigned to me in May and June, it was logical to try the CLC idea again with memos on June 1 and June 29. The June 1 memo discussed the critical importance of "What is the problem?" The memo provided many sources of info, including former and current MARP advisees and their topics. The June 29 memo provided information about (a) the quality movement -- the Malcolm Baldrige National Quality Award Program and the American Society for Quality Control, (b) the changing education paradigm with models by Branson and modified by Terry Overlock. Conceptual framework sheets were included along with a set of research questions.

Then, Virginia Moody sent a memo to the advisees assigned in the spring. Then, Pearley Cunningham sent a memo. Several e-mail messages led to Phillip Davis facilitating the first electronic classroom to discuss MARP ideas on August 20. A second ecr was held on August 28 with eight participants, including three professionals who were assigned in August.

The enclosed memo indicates that two ecrs are scheduled for September 10 and 24. To enter the electronic classroom, type "Ecr 12." A set of "Student Commands" is attached. The third and fourth ecrs will focus on (a) clarity on "What is the problem," (b) good research questions, (c) the use of "Conceptual Framework" and "Changing Paradigms" diagrams, (d) the development problem solving methodology and a set of tentative procedures, and (e) creating a project time line. Terry Overlock made extensive use of electronic library (EL) throughout the program and will discuss EL on September 10. Terry used Branson's technology-based paradigm to co-create a vision and multi-year action plan for multimedia at NMTC which participates in two consortium of 36 school districts.

Later in the fall I will conduct ecrs on other phases of the MARP process including (a) converting a proposal to the MARP report; (b) a project reported in an Appendix; (c) results in Chapter 4; and (d) Chapter 5. If you are not online with NSU, consider getting online and learn to use e-mail, "TALK" and other utilities. An account request form is enclosed.
TO:   MARP Advisees
FROM:  Warren H. Groff
RE:    Sustaining Learning Communities (LC) During the MARP via Electronic Classroom, Sun, Sept 10 & 24, Rm 12
DATE:  September 4, 1995

Two ecrs are scheduled for Sunday, September 10 & 24 at 7:00 Central Standard Time (CST) in classroom 12. To enter, type "Ecr 12" after the prompt.

There is a bit of redundancy in the memos because (a) the impetus for the ecrs came from advisees assigned in spring term and (b) a desire to invite all advisees to participate. The third and fourth ecrs will focus on (a) clarity on "What is the problem," (b) good research questions, (c) the use of "Conceptual Framework" and "Changing Paradigms" diagrams, (d) the development problem solving methodology and a set of tentative procedures, and (e) a realistic project time line.

What is the problem
An example should help focus on this topic. Virginia Moody is going to develop a strategic plan to offer an accredited doctoral program. The U.S. federal government has a mission to promote one form of democracy with authority and power shared with states. To accomplish that mission, it creates infrastructure and employs people, then provides for their professional development through programs and subsidy to pursue programs elsewhere. Some of the programs run by the U.S. government include Air War College, Air University, Army War College, Defense Intelligence College, Federal Executive Institute, National Defense University, etc.

Many people in public service (civilians, government employees, military) find it difficult to pursue graduate programs that exist within the government or at traditional universities. From this brief discussion, what would you focus on for the key issues in her statement of the problem? Next, what are the key research questions? One of the research questions must deal with the three formats of a curriculum - content or body of knowledge to produce High Performance Learner Leaders for the 21st Century, delivery system, and evaluation formats. A second question must deal with organizational development (OD) and human resources development (HRD) components of the strategic plan. What infrastructure is available at Brooks Air Force Base which already uses asynchronous transfer mode (ATM) technology?

Dr. Yng-chien Sheu completed a similar project. He created a strategic plan for a Printing Technology Department at National Taiwan Normal University (ED 372 237). The problem statement focused on preserving culture, improving literacy, increasing productivity, and promoting democracy in Taiwan.
Conceptual Framework and Changing Paradigms Diagrams

A clear statement of the problem leads to good research questions. In Virginia's case, how can we invent a next generation world class doctoral program, initially uniquely tailored for federal government employees, that is far more effective and efficient than current nontraditional models. After good research questions have been stated, an author can use a "Conceptual Framework" diagram and begin to think about how Chapters 1, 2, and 3 would appear. What is the "gist" of things you will write under "Introduction" (Nature of the Problem, Purpose of the Project, Background and Significance of the Problem)? Next, what are the bodies of knowledge you will analyze and synthesize. Third, what problem solving methodology (development, evaluation, and/or research) will you use and what are the tentative procedures you are planning to follow (Guide to MARP Process, pp. 21+).

Branson's knowledge-based paradigm is particularly useful in conceptualizing a vision of curriculum for the 21st Century. Terry Overlock used Branson's model to create a strategic plan for multimedia at Northern Maine Technical College. How could Virginia Moody use these and similar models to co-create a doctoral program for helping transition public service employees to transition into other employment. Some of your peers participated in a session to create "Solution Based Learning Delivered Through Electronic Highways" at the PHE 1991 summer institute (ED 335 519). Some other peers helped to specify a preferred sequence of core seminars in a session at the PHE 1992 summer institute (ED 335 519). Virginia can develop a strategic thinking process to co-create the IDEAL CONSUMER FRIENDLY ONLINE GLOBALVERSITY.

Development Problem Solving Methodology

Most MARPs have focused on the development of a curriculum, a planning manual, or a strategic plan. A strategic plan should include strategic directions with organizational development and human resources development components. Conceptual framework diagrams add clarity to the project.

Collaboration

You have been collaborating ever since your first contact with a PHE representative. You discussed ideas and shared points of view in your first seminar. Some of you probably share resources, seminar papers, practicum proposals and reports, and tools. We can continue that process, staying within ethical and legal boundaries and within PHE policy. We all read many sources of information, some of which could be sent to all members of our learning community and some of which can be sent to individuals with special interests. Advisee names and addresses are enclosed; the list can be xeroxed and used as mailing labels. We make inquiries for information via letter, response cards in publications, etc. Byte includes three cards so I usually complete cards for myself and two other people. Articles can be shared.
Realistic Time Line

Beyond problem and procedure questions, the most frequently asked questions relate to time line. Only you can determine a realistic time line for your project because only you know existing personal and professional commitments. Individuals who completed seminars and practicums concurrently and with relative ease may be less encumbered more task focused than individuals that spread practicums into the third through fifth years. Develop a realistic time line. Plan the two weeks turn around time from the date of receipt of a document by a committee member to the date it is returned to you, not time in route. Send hard copy, not electronic copy or fax copy unless authorized to do so. Waive signature.

Data are difficult to interpret. What is a draft or a revision? A great deal depends on the author. The document MUST be of high quality and MUST comply with APA-PHE form and style. An analysis of various stages of the MARP process for my advisees is as follows:

Prospectus - the range has been from 1 through 5 drafts, 1 to 3 for the major advisor and up to 5 for the committee. Prospectus approval has ranged from 1 month, for someone working on it full time and access to all NSU Western Office resources, to 12 months. The average time from being assigned to approval of the prospectus has been 2.8 months.

Proposal - the range has been from 3 to 15 editions, 3 to 10 for the major advisor and the others for the committee. Proposal approval has ranged from 1 to 16 months. The average time from approval of the prospectus to approval of the proposal has been 5.9 months. Individuals with a fourth practicum report must add time.

Product and Report. This usually consists of five parts - converting the proposal to Chapters 1-3, the product (often the last appendix in the report), Chapter 4, Chapter 5, and the full document. Converting the proposal to Chapter 1-3 will usually require 1 or 2 drafts. The product and Chapters 4 and 5 will usually require 2 to 4 separate drafts. A review of the full MARP report will usually require 1 or 2 drafts before the total document is ready for the entire committee. The range has been from 5 months, for someone working full time and access to all Western Office resources, to 24 months. The average has been 8.7 months.

Total MARP Completion from time of being assigned to signatures on the MARP report has extended to 31 months for someone transferred in the military and 36 months for a college department chair who simply chose a different topic even through she was nearing the completion of a proposal on her first topic. The average time for completion has been 17.2 months. If you discount the above-mentioned lengths of 31 and 36 months, the average has been 14.3.

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<th>Summary Average Time Line with Ranges in Months</th>
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<tr>
<td>Prospectus</td>
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So, Where’s the IT Payoff?

Spend $1 trillion and what do you get? Productivity payoff—or just deeper in debt?

Businesses that expected a big productivity payoff from investing in IT (information technology) are, in many cases, still waiting to collect. Numerous studies indicate how frequently this has been the case, despite massive investments over the past 25 years. During the past decade, businesses have invested $1 trillion in technology—but economic productivity has remained stagnant.

Those who see a productivity payoff argue that it debunks the productivity paradox. However, a careful analysis shows that any payoff can be attributed more to changes in management practices—downsizing, business reengineering, foreign outsourcing—than to use of technology.

So, the productivity paradox does indeed exist. But what causes it? Most readers long on computer experience must have had that nagging feeling that all is not right in computerland—that maybe writing your own letters because you now have a word processor, instead of having the office secretary do it, and doing your own desktop publishing aren’t all they’re cracked up to be. The time spent learning some of these programs can be counterproductive. However, this is just the tip of the iceberg and a superficial cause of the productivity bust.

Aside from the obvious, such as poor management, lack of experience, and poor use of tools, the biggest productivity inhibitors, surprisingly, are external. Commercial software is a good example. It’s extremely buggy. This wasn’t always the case. The age of the mainframe was the age of quality software. Today’s competitive “get it out the door before they do” mentality forces beta-quality software on users who expect production quality. The Intel Pentium debacle is just the latest bug perpetrated on us. Underlying flaws are found in just about every piece of personal computer software being sold today. There is not one among us who has not experienced these little peculiarities—from compression programs eating entire hard disks to conflicts between device drivers. All these diminish our productivity.

Aside from an extremely high number of bugs in its software, the personal computer has also spawned an almost unimaginable number of people professing expertise in its deployment. The problem is twofold. One, many consultants are not the experts they claim to be. Two, the personal computer consultant is about as useful as the mainframe consultant. Both know only half the equation. Both will provide only those solutions they excel in. In other words, hire a consultant with dBase experience, and you get a dBase solution.

Of course, there is nothing wrong with dBase consultants. The problem is that organizations often hire anyone carrying a laptop and having a good command of technospeak. What they get is seldom a productive solution to their business problem.

Larger companies armed with professional MIS staffs have the wherewithal to make better technology decisions and hence have a better chance of increasing productivity. But even these larger organizations are at risk. Not everyone is an expert at everything, so the dutiful MIS type leans heavily on advice gleaned not from his or her peers but from trade publications. This is a fatal flaw. If you compare other industries to the computer industry, you’ll notice a disturbing trend. In most other industries, the trade magazines and newsletters are edited and written, for the most part, by industry experts. On the other hand, the majority of computer-industry magazines and newsletters are written by journalists and freelancers with little technology experience.

Not too long ago, I read an article in a major industry weekly about building an expert system. Being somewhat of an expert in this particular area, I closely examined the freelanced article. I found no fewer than 20 mistakes. The danger here is that nonexperts reading this article are taking flawed advice—with ramifications that can seriously affect the bottom lines of their organizations.

A few thousand years ago, the Romans had some good advice for those venturing into the marketplace armed with many dollars but little experience. Eloquent sounding in Latin, caveat emptor is especially meaningful for those searching for the high road to productivity today. Let the buyer beware.

Jessica Keyes is president of New Art Communications, a consulting firm based in New York City. She formerly was managing director of technology for the New York Stock Exchange. She is the author of seven books, including The McGraw-Hill Multimedia Handbook and Solving the Productivity Paradox. You can reach her on BIX c/o “editor” or on the Internet at newart@panix.com.
God and Internet: Religion in 1990s takes cyber-twist

By David Waters
The Commercial Appeal

Click.
"There are God knows how many computers out there, and all of them have the capacity to become little altars..."
Click.
"It is not just the religion of my birth of which I'm rebelling, it is all forms of organized religion..."
Click.
"My ministry is my (computer) Bulletin Board. I think, in fact, that the computer age is the past, present and future..."
Click.

It's a sultry Sunday afternoon in the buckle of the Bible Belt, and Rich Cook — seminary student, nonprofit CEO and Generation Xer — is browsing through the Internet.

"There are all kinds of yahoos out there," said Cook from his PC-pew as he scrolled through something calling itself The First Church of Cyberspace.

"Traditional religion really hasn't caught on yet to the possibilities."

Cook's efforts to find a live online worship service proved futile. This Internet veteran has never found one — at least not one he would recommend to his parents.

But someday, if Cook has his way, the sick, the handicapped, the elderly, anyone who can't get to a sanctuary of choice will be able to attend the service via the home computer.

Yet Cook knows the road to cyberspace begins with one step. For local churches, that first step could be Jericho Road Inc.

Jericho Road is a nonprofit organization that began with a class assignment this summer at Memphis Theological Seminary. The class was "Church Ministry in the City." The assignment: Visit local urban ministries; then create one.

Cook and his classmates were struck by the number and variety of programs. Cook, a lifelong Memphian, had never heard of many of them.

"It started to become apparent, not that a new ministry was needed, but that we needed to publicize the ministries that did exist," Cook wrote in his paper.

So, Cook put Memphis area churches on the Internet.

Anyone online from Bangkok to Bartlett can click on Jericho Road Inc. and find information on dozens of local ministries and other social services.

Say the First Baptist Church of Southwest Shelby wants to start an after-school program. It can call up Jericho Road and click into Services Available, which has detailed listings of existing after-school programs.

Say a man in Midtown wants to volunteer. He can click onto the Jericho Road, punch up Volunteer Opportunities and find United Methodist Neighborhood Centers, which need tutors.

Jericho Road went online July 20. Since then, Cook has gathered information and keyed into his system 116 local churches and agencies.

Jericho's E-mail address is jericho@epona.magibox.net.

With more than 2,000 churches in the Shelby County area, Cook knows a complete listing will take some time. And Cook is not only the president and CEO of Jericho Road, he's also the staff.

But the United Methodist member hopes the free service will encourage many churches to take advantage of the program. In the first month of operation, the Internet address recorded 346 inquiries into Jericho Road.

Cook, 29, spent 11 years in the computer industry before enrolling in seminary in January. He said he has found the church at large to be resistant to the computer age.

"It might be a generational thing, but I see the Internet as the circuit rider of the 1990s.

"I'll bet there was reluctance to use the telephone when it came out, but today no minister would hesitate to call Mrs. Smith to see how she's feeling. You don't go out and get on your horse anymore.

"God gave us this technology to use it."

Dr. Donald McKim is academic dean at the seminary. He said the church is slow to change.

"We need some visionaries who will show us the potential," he said.

McKim sees a danger in allowing computer methvenience to substitute for good old-fashioned personal fellowship. But he sees another danger. "If mainstream churches don't take advantage, it leaves the field open to hucksters."

Christ United Methodist Church installed a computer system in 1991. The church continues to upgrade and find new applications.

Dr. James Loftin, associate pastor, uses online services to communicate with 15 missionaries around the world.

"For someone in a place like Kazakhstan, where paper messages are screened and phone lines are unreliable, this is invaluable."

"There's no question the computer is quickly becoming the communications device of the decade for missionaries," Loftin said.

Cook himself uses the Internet in his studies. The World Wide Web gives him immediate access to historic documents and church-related news and views.

A cursory glance on a Sunday afternoon found an ongoing debate on the Methodist Confessing Movement.

"Any church can get access," Cook said.
Calling Washington D.C.—On-Line
With a Modem, the Government Is at Your Fingertips

It's time for you to get the latest in hot political issues straight from the horse's mouth—that means our nation's capital, not your public affairs consultant! If you have never toured the White House or visited Washington, D.C., at least going on-line will be the next best thing. You can take a virtual tour of the White House and browse through press releases, leave a message for Sox the cat, and even keep in touch with your local Congressman. Now, through America Online or the Internet, you can access the White House, the Library of Congress, Congress, the Census Bureau and a whole host of other institutions.

Here are my top suggestions on finding information about politics and the government at your fingertips. I've listed the places I would look, or which I think you might want to visit, followed by the Internet or on-line system address you will need to touch base.

The White House (WWW:http://www.whitehouse.)
It doesn't make a difference whether or not you are a fan of Bill Clinton. It is always important to see what the president has to say about the economy, foreign affairs, and domestic policies. If you missed his last speech on the budget, you can find it on the Web site. Here you will find press releases, speeches, presidential appointment schedules, and much more. There is also an opportunity to take a tour of the White House and leave a message for either Hillary or Sox.

The Library of Congress (Gopher-Marvel.loc.gov)
The Library of Congress is a great place for all types of information such as Census Bureau data and U.S. State Department reports. At the Library of Congress Gopher site, you can access a wide range of governmental information from the day-to-day business of Congress to the full text of Supreme Court rulings. You can also review information from executive branch agencies such as the Federal Communications Commission, the Department of Justice, obtain the House of Representatives' weekly schedule, check on the status of a bill, or read up on last year's election results.

Thomas (WWW:http://thomas.loc.gov)
This is the site for the U.S. Congress. Thomas derives its name after President Thomas Jefferson. It's a recent Web site started by the Library of Congress that offers a vast array of governmental information. You can search for any bills introduced in the previous 103rd Congress or on the current session of Congress. You can also get a full text of the daily Congressional Record, learn how the nation's laws are being made, or check on the progress of the Republican Party's Contract with America.

Capital Connection (America Online keywords: Capital, Politics, Government)
America Online's Capital Connection provides political junkies with a wide selection of information from which to obtain political and government news. You can read political news prepared by ABC News Polls, or review summaries of public affairs broadcasts such as the McLaughlin Group, National Public Radio, or Washington Week in Review. The message boards, which hash out partisan differences, include such titles as Political View Point, Pending Legislation, Federal Budget Taxes, General Debate, and Defense Posts. After visiting with the quick printing area (keyword NAQP), stop by and see what is happening with politics.

News Groups (Talk.politics.misc)
Internet user groups offer a wide variety of political and government partisan debate. One such news group, talk.politics.misc, offers diverse views and opinions on all sorts of political issues and topics. Send a message to the system administrator and have your name added to millions of others who join the debate on the pros and cons of any issue.

Republican/Democrat (CompuServe keywords: Democrat, Republican)
Even if Democrats and Republicans do not often agree, at least there are places they can go to debate hot issues. Get the latest on the takeover of Congress, Welfare Reform Legislation, and the 1996 Presidential nominees. There is also plenty of political party information in the forms libraries.

FedWorld (WWW: http://www.fedworld.gov)
Created by the National Technical Information Service, which is part of the Commerce Department, Fedworld offers more than 190 government bulletin boards with access to a vast array of government agencies and departments. Through Fedworld, you can access databases of government reports as well as governmental information servers containing information about manufacturing, education, space technology, and transportation.

Federal Bulletin Board (Modem: 202/512-1387)
While the government runs dozens of dial-up bulletin boards, the federal bulletin board is one of the most comprehensive offerings. Overseen by the Superintendent of Public Documents of the U.S. Government Printing Office, this BBS houses most government documents, publications, and offers free and fee-based access files and documents. Users are given free access to government reports, press releases and seminars, while other areas require users to have an account to access information or to order a particular document.

For more information on these and other issues, contact Jeff Hayzlett, Quick Printing Industry Public Affairs Consultant, at 605/371-0515, or fax him at (605) 371-0610.

JEFFREY W. HAYZLETT
A primary ultimate outcome of SLCDE is to help each of you to have the most meaningful learning experience while engaged in a high quality major applied research project (MARP) with the assistance of technology available at NSU and elsewhere. As I began to think about the ecrs for September 10 and 24, I thought about "notes" sheets that could help cognitively to stay on task with agenda items. Attached is a packet of work sheets intended to assist us. Classroom 12 is reserved from 6:45 p.m. Central Standard Time (CST) until 9:00 p.m.

Agenda Items

1. What is the problem? What are the issues?
2. Research questions.
3. Use of conceptual framework diagrams.
5. Electronic Library - Terry Overlock (He may begin with a statement about his MARP)
6. Realistic time line.
7. Suggestions for agenda items and future ecrs.

This is a group learning activity. Therefore, a primary consideration is applicability to all or most members of the "Learning Community." Questions and responses should be adequate, but relatively short and benefit most members. Complete you comment with -0-. Additional discussion about substantive ideas, particularly between two or a few people should be scheduled at another time, possibly through TALK. Ecrs for other small groups can be scheduled through Dr. Al Mizell (1-800-986-3223 x7479).

Even though there have been a few minor problems, SLCDE is evolving nicely. I apologize for emphasizing quality and having several errors in my memo. I only saved the correct edition on one of the discs and printed from the wrong one. Also, the file with advisee addresses "froze" two times. Advisee addresses will be sent in a subsequent mailing.
Agenda Item

1. What is the problem? What are the issues?

Issue 1. ____________________________ (Gist of the idea)

Issue 2. ____________________________ (Gist of the idea)

Issue 3. ____________________________ (Gist of the idea)

Issue n. ____________________________ (Gist of the idea)
Agenda Item

1. What is the problem? What are the issues?

Numerous factors are converging in the later half of the 20th century which will make it possible, and mandate, that education and training be re-engineered. These factors are demographic/social, economic, political & technological.

First, demographic and social conditions ....

Second, economic variables, including establishments and jobs, are ....

Third, political systems for decision making and governance are beginning to be restructured ....

Fourth, and possibly most important, technology has been developed that makes it possible to envision entirely new human resources development systems that will be qualitative superior to current paradigms.

A primary problem is that Canoit University simply has not had the will to think strategically about reengineering.

2. Research questions.

Res Q 1. __________________________ (Gist of the idea)

Res Q 2. __________________________ (Gist of the idea)

Res Q 3. __________________________ (Gist of the idea)

Res Q n. __________________________ (Gist of the idea)

Create worksheets for the other agenda items.
Networked Multimedia
Changing The Face Of Business Computing

By Christine Hernrick

During the past 10 years, client/server computing has revolutionized the way businesses utilize I/T. Now another technology stands poised to make a similar impact on business computing and network infrastructures: networked multimedia.

In many ways, the multimedia revolution is already underway. Business multimedia computer applications represented a $1.5 billion market in 1993 and a $3.0 billion enterprise in 1994, with even more dramatic growth forecast for the next two years.

Why is multimedia assuming greater importance on the business I/T agenda?

One reason is the major advancement of key multimedia technology components resulting from significant investment by industry giants such as Intel, Apple, Silicon Graphics and Oracle.

With improved, cost-effective technology, the use of multimedia is growing rapidly in a wide variety of business applications, including:

- Training
- Interactive sharing of whiteboards, spreadsheets, presentation materials
- Three-dimensional design systems
- Customer service support

Multimedia adds more than sizzle to applications such as these — it also reduces the need for travel to conferences and training sessions, enhances workgroup collaboration and provides faster, more effective learning, all of which translates into greater individual and group productivity and higher return on corporate investments.

The impact of reduced cost barriers and ease of installation on the growth of the business multimedia market should not be underestimated. Eighty percent of the PCs sold during 1995 will be multimedia-capable, and most can be quickly and easily enhanced with a desktop color video camera for only a few hundred dollars. This minimal investment permits bottom-up introduction of multimedia applications into the enterprise by individual users and workgroups — the same dynamic responsible for igniting the LAN explosion a decade ago.

Maximize Benefits

Networking quickly multiplies the inherent benefits of multimedia applications. Just as data networks represented a welcome advance over the floppy-disk sneakernet of the 1980s, video servers offer incalculable administrative, information-delivery and security advantages over manual approaches to multimedia distribution. Why ship a CD by overnight or two-day courier when you can distribute video or audio anywhere in the world over a network in seconds?

And here's the good news: It doesn't take a forklift upgrade for most organizations to add multimedia applications to existing networks. Most organizations can comfortably accommodate multimedia with their current resources by simply providing three primary network requirements:

- Scalable bandwidth
- Consistent service quality
- Efficient multipoint communication.

Optimize Current Bandwidth

While it is often assumed multimedia demands enormous bandwidth, multimedia applications actually have a wide range of bandwidth requirements. And thanks to continual improvements in coding and compression technology, multimedia applications are becoming increasingly efficient — well within the range of most corporate workgroups, especially those employing LAN microsegmentation and cost-effective LAN switching.

The major challenge in supplying sufficient bandwidth for multimedia today concerns the WAN, where monthly line charges comprise an estimated 60 to 80 percent of a network's operational costs. Extending multimedia applications beyond the workgroup or campus environment requires bandwidth-saving techniques for guaranteeing service quality and efficient multipoint communication.

Guarantee Consistent Service

Meeting the service requirements of multimedia applications with audio and video demands greater network sophistication and more intelligent application-network communication such as queuing algorithms.

One emerging standard, the Reservation Protocol (RSVP), allows applications to specify particular service requirements, enabling the network to reserve and dedicate sufficient bandwidth and other resources. This capability gives corporations a proactive approach for avoiding network oversubscription due to unexpected traffic load.

Multicast routing, as specified in open standards, such as those developed for the Internetwork Protocol (IP) and Apple's AppleTalk protocol, will provide the answer to efficient support of networked multimedia for most — if not all — organizations.

Multimedia Today

Multimedia applications signal an exciting new phase of business communication, one that fosters faster training, increased productivity and enhanced collaboration. Perhaps the biggest benefit of all, however, is the efficiency with which multimedia applications can be added to most organizations' existing network infrastructures. Using advances in networking technology, companies now have the tools required to guarantee the bandwidth, consistent service quality and efficient multipoint communication necessary to support networked multimedia — and to change the face of their business communication forever.
TO: MARP Advisees
FROM: Warren H. Groff
RE: Sustaining Learning Communities in A Digital Era
DATE: September 19, 1995

The ecr on Sept. 10 was a great success. Our next ecr will be on Sept. 24, Classroom 12, 7-9, Central (Memphis) Time. We will focus on problems, issues, and research questions. The Sept. 4 memo discussed one problem and recommended the completion of conceptual framework diagrams. People who complete conceptual frameworks are able to articulate more clearly, verbally and then in writing, their problem/topic. The Sept. 8 memo provided work sheets to assist you.

Other ecrs will be in Classroom 12, from 7-9, Central Time. Major focus/topics will be:
Oct 8 and 22 Converting Proposal to Chapters 1-3.
Nov 5 and 19 The Project (usually the last Appendix).
Dec 3 and 17 Chapter 4 and then Chapter 5.

An approved prospectus authorizes a researcher/scholar to more fully explore the topic. Recommendations from all three members of the committee must be considered. Development problem solving procedures must be detailed. The proposed solution to the problem will be a product. The writer must discuss in detail how the product will be developed, step by step. How will decisions be made to exclude some items and include other items based on some criteria? A formative committee often helps to establish the criteria. A summative committee often evaluates the product to determine how well it meets the criteria. The proposal must reflect a high level of research and scholarship and MUST comply with APA-PHE form and style.

Converting the proposal to Chapters 1-3 is an important step that provides an opportunity to synthesize additional insights and research into Chapter 2. A writer can work on developing the product and begin to convert the proposal to the report at the same time. While working through the various procedures in developing the product, additional research can be analyzed and included in Chapter 2. Converting the proposal to Chapters 1-3 goes beyond merely "mechanical reformatting." It provides a scholar with an opportunity to "gain higher cognitive ground" and express that position in carefully chosen clear English.

"Technology for All Americans" to develop national standards for technology education is online through the Blacksburg Electronic Village: http://scholar.lib.vy.edu/TAA/TAA.html.

Technology is changing the way we work, live, and learn. And the Office of Educational Research and Improvement (OERI), through many of its services and programs, is making it easier for everyone everywhere—researchers, practitioners, teachers, students, parents, and policymakers—to access information.

Star Schools and Teacher Networking Technology

Electronic access to information is perhaps one of the most pressing needs of the nineties. What's available, and how is it being used by OERI? Satellite, Internet, cable, interactive videodiscs, microcomputers, and fiber optics are some distance education technologies used by projects funded by OERI's Office of Reform Assistance and Dissemination (ORAD). Through its Star Schools Program, quality, cost-effective instruction through distance education technologies is provided to more than 1,640,000 learners annually in the 50 states and U.S. territories. Schools have access to instructional programs that not only serve K-12 students, including limited-English-proficient and disabled students, but also parents and teachers. One project, the Education Satellite Network (a service of the Missouri School Boards Association), publishes a monthly satellite program guide, the Education SATLINK. The guide provides schools across the nation with information about satellite programs, training, and technology available via satellite and cable. For information about the projects, call Tawanna Colbert at 202–219–2143.

Information Online

OERI's National Library of Education (NLE) maintains an electronic repository of education information and provides public access through electronic networks: INet (an Internet-based service) makes information available through World Wide Web, Gopher, and FTP servers; and the OERI toll-free electronic bulletin board (see page 5). NLE also shares information through the Educational Resources Information Center (ERIC), the world's largest education database; the 16 subject-specific ERIC clearinghouses; 9 adjunct clearinghouses; and 4 ERIC support components. ERIC's database contains over 850,000 records of journal articles, research reports, curriculum and teaching guides, conference papers, and books on education research and practice. The ERIC database can be accessed in both printed and electronic forms via online vendors, standalone CD-ROM products, and Internet-based files. Through OERI's online AskERIC service at askeric@ericir.syr.edu (OERI-funded and operated by the ERIC Clearinghouse on Information and Technology), teachers, library media specialists, administrators, and parents nationwide can get answers to education questions. Questions sent by e-mail are answered within 48 hours. Parents also can get information about raising and educating their children from the National Parent Information Network (NPIN), an online service of two ERIC Clearinghouses: Elementary and Early Childhood Education and Urban Education. For more information about NPIN, call 1–800–583–4135 or 1–800–601–4868. If you have Internet

(Continued on page 5)
Technology and OERI, from page 1

access, gopher to ericps.ed.uiuc.edu. For a list of the ERIC Clearinghouses and help finding the best way to use ERIC, call 1-800-LET-ERIC.

ERIC's state-of-the-art Technology Resources Center serves as a demonstration site for the application of technology at all levels of education. It provides introductions to new technologies (both hardware and software), examinations of programs and products, and demonstrations designed for specific needs. For more information about the Center or to arrange a visit, call Sheldon Fisher at 202-219-1699.

OERI's Library Programs (LP) Office administers a variety of programs under the Library Services and Construction Act and the Higher Education Act which are available on a state formula grant or discretionary grant basis. Grants are used to develop and enhance technologies to simplify access to the information superhighway for everyone and to foster resource sharing and cooperation among libraries.

One of LP's most recently funded projects in Maryland became the first in the nation to offer residents free direct connection to the Internet. Spearheaded by the Maryland Department of Education's Division of Library Development and Services, and with the help of librarians from across the library community, the SAILOR project is an online public information network that connects Marylanders and their libraries to resources within the state and worldwide and provides free access to the Internet. Access to the network can be gained through computers in local public libraries or by modem from an individual's home or business computer. Students have access through their school's library media center. Many of the network's services are free; however, for full interactive access to Internet, an Internet account must be purchased from a local public library system or a commercial vendor. For more information about the SAILOR project, contact Barbara G. Smith on 401-767-0436. For information on federal library grant programs, call the Office of Library Programs at 202-219-2293.

Statistics Online

Getting the word out on the data it collects is a primary activity of the National Center for Education Statistics (NCES). Presently, NCES is upgrading its electronic dissemination techniques to reach a broader audience and to reflect the rapidly changing technologies available not only to NCES but also to its current and potential users. These techniques include CD-ROM and Internet. Information available through the Internet includes announcements of new publications and datasets, press releases, and full-text publications. Internet users, through the National Data Resource Center (NDRC), also have access to, and can request analysis of, data collected from the various education surveys and studies that NCES conducts. Send requests to NDRC online at ndrc@inet.ed.gov. Major databases, electronic codebooks, and table generation software are available on CD-ROM (see page 8).

A project recently funded by NCES with Nynex Corporation will focus on developing a client/server application set designed to support the electronic collection and dissemination of education data between and among participating state and federal agencies. For more information about NCES' technology activities, contact Bill Freund at bill_freund@ed.gov or 202-219-1373.

Video Available

To order videos write: U.S. Government Printing Office, Superintendent of Documents, P.O. Box 371954, Pittsburgh, PA 15250-7954. Specify catalog number and include payment.

SPEEDE/EXPRESS introduces a new standardized format that can be used nationwide by schools, school districts, and postsecondary institutions for electronic data interchange.

SPEEDE stands for Standardization of Postsecondary Education Electronic Data Exchange, and EXPRESS stands for Exchange of Permanent Records Electronically for Students and Schools. Running time: 0:12:30; cost: $19; catalog #065-000-00758-4. Includes a brochure with the same title.

OERI Online Access

OERI has an Electronic Bulletin Board at 1-800-222-4922 (non-toll-free at 202-219-1511). For technical questions, call 202-219-1547.

Internet users can access and download even more OERI and U.S. Department of Education resources and information—including legislation, publication summaries and full texts, grant information, datasets, and phone directories—by:

• World Wide Web browser such as Mosaic or Lynx (URL = http://www.ed.gov);

• Gopher client (gopher to gopher.ed.gov or select North America ➔ USA ➔ General U.S. ➔ Department of Education);

• FTP client (ftp to ftp.ed.gov, logon: anonymous);

• E-mail to almanac@inet.ed.gov (type "send catalog" in the body of the message).

E-mail questions about the servers to gopheradm@inet.ed.gov.
**Phone List**

*Note: All numbers are in area code 202 unless otherwise indicated.*

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<th>National Library of Education (NLE)</th>
<th>Education of At-Risk Students (ATRISK)</th>
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<td>Educational Governance, Finance, Policymaking &amp; Management (GFI)</td>
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<td>Acting Director,</td>
<td>Information Office .</td>
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<tr>
<td>Robert Klassen</td>
<td>1-800-424-1616</td>
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<tr>
<td>State Programs</td>
<td>202-219-1692 in DC area) provides information about OERI research, statistics, publications, and data tapes.</td>
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<tr>
<td>Discretionary Programs</td>
<td>ACCESS ERIC .</td>
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<tr>
<td>219-2293</td>
<td>1-800-LET-ERIC coordinates information in ERIC (Educational Resources Information Center), the world's largest education database.</td>
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<td>Electronic Bulletin Board.</td>
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<td>1-800-222-4922 (non-toll-free) provides information electronically.</td>
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For other electronic access to OERI information, see page 5.
TECHNOLOGY

ISDN is newest high-tech need

By Rachel Beck
The Associated Press

NEW YORK — There are no bankers, stock brokers or insurance agents at the PFA Financial Centers that dot shopping malls in the South, but customers still go there to buy hot new stocks or refinance their mortgages.

Telephones and video screens connect customers with financial experts around the country. The stroke of one key brings up a securities broker in New York. Another connects a mortgage banker in Charlotte, N.C. Insurance agents and bankers also are available.

Bridging the customer and expert is a telephone connection known as ISDN, which carries voice, data and video over existing telephone lines by putting them into the digital language of computers.

"ISDN allows live interaction to go on like you're really sitting in a room with someone," said Richard D'Ago-stino, president of Charlotte, N.C.-based PFA, which is owned by New York Life Insurance Co.

AT&T developed ISDN, which stands for Integrated Services Digital Network, in 1978 and initially promised that millions of homes would be using such lines by the 1990s.

But the company's breakup in 1984 and subsequent reorganization of the local telephone business pushed the idea aside. It is only now that telephone company customers are pushing for ISDN, chiefly because it's a relatively cheap, quick way to get access to lines that can carry more signals.

"When ISDN was first introduced, the world wasn't so high-tech," said Gerry Lenaghan, product manager on the ISDN team at Nynex Corp. in New York. "Now, demand has exploded as more and more people want to jump around the Internet or set up video conferencing."

But it's still not available everywhere. Less than half the customers of Bell South, Nynex and US West can order it.

"There have been some technical hurdles that are making ISDN hard to get, especially outside major metropolitan areas," said Karl Kister, chief operating officer of Digital Telemedia Inc., a New York ISDN consulting firm. "So it's not everywhere and may not be for a while."

ISDN is far greater use in Europe, where 850,000 households — half of them in Germany — have it. There are about 300,000 ISDN customers in the United States.

ISDN upgrades standard lines to allow for three "conversations" — from a regular call to a fax to a videoconference — to go on at once.

"Everything can come from one line," said Wayne McCallum, an ISDN product manager for GTE Corp. in Dallas. "With the (regular) lines, each thing had to be set up separately."

Whether all of the devices are running together or individually, the ISDN line can have a maximum signal capacity of 128,000 bits, or pieces of computer data, per second. By comparison, the most advanced computer modems send data at 28,000 bits per second and more typical are modems at 14,400 or 9,600 bits per second.

Prices for ISDN have dropped sharply during the past year. In New York, charges about $34 for regular service ISDN plus an extra $10 per minute charge.

Bell offers ISDN with free use weekends.

Better lines of communication

Source: Bellcore
TO: MARP Advisees  
FROM: Warren H. Groff  
RE: Sustaining Learning Communities in A Digital Era  
DATE: September 29, 1995

The ecr on Sept. 24 was a success. Other ecrs will be in Classroom 12, from 7-9, Central Time. Major focus/topics will be:
- Oct 8 and 22 Converting Proposal to Chapters 1-3.
- Nov 5 and 19 The Project (usually the last Appendix).
- Dec 3 and 17 Chapter 4 and then Chapter 5.

EDUCOM and CAUSE are organizations leading us into the new era along with the Society for Applied Learning Technology and the International Society for Technology in Education. I have requested that information be sent to you from these four organizations as well as from the World Future Society, the Computer Learning Foundation, and a number of others.

Two advisees asked for information about other students. Robert Bolge sent a letter to advisees in his peer group (a) providing ERIC numbers of three of his documents that can be accessed and a planning model + (b) requesting information. ED 376 876 Access Barriers at Mercer Co CC. 
ED 367 419 Plan to Make OIR a HRD Utility at MCCC. 
ED 367 398 Perceptions of Societal Factors Impacts on MCCC. Enclosed is a "Personal Data Variables" sheet to help share.

Marge Rowland typed mailing labels for us. Copy the labels if you want several sets. I did not include Chong-Sun Hong who is in the final stage of MARP completion and Kenred Christian who is in Jamaica, W.I., at the College of Arts, Science and Technology (CAST). Keep Kenred on your list.

Ms. Chong-Sun Hong  
Taeyoung 8th Apt. #1706  
1402. 1087 Iisan-dong  
Koyang-city, Kyonggi-do,  
SOUTH KOREA

Mr. Kenred Christian  
c/o Mr. Kirk McGregor  
2929 Missionwood Lane West  
Miramar, FL 33025  
(Mail is flown to Kenred)

Terry Overlock has completed a first full draft of his MARP report. Enclosed is his model adapted from Branson and a conceptual framework sheet for a multi-year plan. What are the competencies and skills necessary in a curriculum to produce High Performance Learner Workers? How could HPLWs access databases via networks? What is needed in terms of organizational development and human resources development?

There are so many things that can be shared. Enclosed are:
- Getting NSF Information and Publications. 
- NSF Supercomputer Centers. 
- Coursework Grants from the Pittsburgh Supercomputer Center. 
- NSF Publications request for September 1995. You may want to regularly receive the Bulletin. If so, request it.
Practicums and MARP

Last Name (Print)                First Name (Print)                UNIX user code

Number and Street

City                State/Country                Zip

Home Telephone                  Home Fax                  Indicate preference

Work Telephone                  Work Fax

Practicums (Indicate Title & ERIC No. if in ERIC)

1.

2.

3.

4.

5. (Some advisees started when PHE had five practicums)

Major Applied Research Project Title:

Attach items you are willing to share.

- Abstract
- Problem Statement
- Research Questions
- Definition of Terms
- Assumptions
- Procedures

List items you are interested in receiving.

Copy the labels for future mailings and then send the information to members of our Learning Community.
Figure 1. Changing Paradigms

GETTING NSF INFORMATION AND PUBLICATIONS

The National Science Foundation (NSF) has several ways for the public to receive information and publications. Electronic or printed copies of the NSF telephone directory, abstracts of awards made since 1989, and many NSF publications are available as described below. To access information electronically, there is no cost to you except for possible phone and Internet access charges. Choose the method of access that matches your computer and network tools. For general information about Internet access and Internet tools, please contact your local computer support organization.

WORLD WIDE WEB: NSF HOME PAGE
The World Wide Web (WWW) system makes it possible to view text material as well as graphics, video, and sound. You will need special software (a "web browser") to access the NSF Home Page. The URL (Uniform Resource Locator) is http://www.nsf.gov/.

INTERNET GOPHER
The Internet Gopher provides access to information on NSF's Science and Technology Information System (STIS) through a series of menus. To access the Gopher, you need Gopher client software; the NSF Gopher server is on port 70 of stis.nsf.gov.

ANONYMOUS FTP (FILE TRANSFER PROGRAM)
Internet users who are familiar with FTP can easily transfer NSF documents to their local system for browsing and printing. The best way to access NSF information is to first look at the index (file name: index.txt). From the index, you can select the files you need. FTP instructions are:
- FTP to stis.nsf.gov.
- Enter anonymous for the user name, and your e-mail address for the password.
- Retrieve the appropriate file (i.e., filename.ext).

E-MAIL (ELECTRONIC-MAIL)
To get documents via e-mail, send your request to the Internet address stisserve@nsf.gov. The best way to find NSF information is to request the index. Your e-mail message should read: get index.txt. An index with file names will be sent to you. However if you know the file name of the document you want, your e-mail message should read: get filename.ext.

E-MAIL MAILING LISTS
NSF maintains several mailing lists to keep you automatically informed of new electronic publications. To get descriptions of the mail lists and instructions for subscribing, send your request to: stisserve@nsf.gov. Your message should read: get stisdirm.txt.

ON-LINE STIS
NSF's Science and Technology Information System (STIS) is an electronic publications dissemination system available via the Internet (telnet to stis.nsf.gov); you will need a VT100 emulator. The system features a full-text search and retrieval software (TOPIC) to help you locate the documents. Login as public and follow the instructions on the screen.

To get an electronic copy of the "STIS USERS GUIDE," NSF 94-10, send an e-mail request to: stisserve@nsf.gov. Your message should read: get NSF9410.txt. For a printed copy of the "STIS USERS GUIDE," see instructions "How To Request Printed NSF Publications."

NON-INTERNET ACCESS VIA MODEM
If you do not have an Internet connection, you can use remote login to access NSF publications on NSF's on-line system, STIS. You need a VT100 terminal emulator on your computer and a modem.
- Dial 703-306-0212,
- choose 1200, 2400, or 9600 baud,
- use settings 7-E-1, and
- login as public and follow the on-screen instructions.

HOW TO REQUEST PRINTED NSF PUBLICATIONS
You may request printed publications in the following ways:
- send e-mail request to: pubs@nsf.gov
- fax request to: 703-644-4278
- for phone request, call: 703-306-1130 or Telephonic Device for the Deaf (TDD 703-306-0090)
- send written request to: NSF Forms and Publications Unit 4201 Wilson Boulevard Room P-15 Arlington, VA 22230

When making a request, please include the following information:
- NSF publication number;
- number of copies; and
- your complete mailing address.

QUESTIONS ABOUT NSF PUBLICATIONS, PROGRAMS, ETC.
Contact the NSF Information Center if you have questions about publications, including publication availability, titles, and numbers. The NSF Information Center maintains a supply of many NSF publications for public use. You may:
- visit the NSF Information Center, located on the second floor at 4201 Wilson Blvd., Arlington, Virginia.; or
- call the NSF Information Center at 703-306-1234, or 703-306-0090 for TDD; or
- send e-mail message to info@nsf.gov.

QUESTIONS ABOUT THE ELECTRONIC SYSTEM
Send specific, system-related questions about NSF electronic publication services that are not answered in this flyer, to webmaster@nsf.gov or call 703-306-0214 (voice mail).
FOR ADDITIONAL INFORMATION

For information on the NSF centers, access to the supercomputers, educational activities, industrial programs, conferences, hardware or software, please contact:

**Cornell Theory Center**
Linda Callahan
514 Engineering and Theory Center Building
Ithaca, NY 14853-3801
607-254-8610
cal@theory.tc.cornell.edu (Internet)
cal@CRNLTHRY (BITNET)

**National Center for Atmospheric Research, Scientific Computing Division**
Visitor/User Information
P.O. Box 3000
Boulder, CO 80307
303-497-1225
scdinfo@ncar.ucar.edu (Internet)
scdinfo@ncario (BITNET)

**National Center for Supercomputing Applications**
Scott Lathrop
605 East Springfield Avenue
Champaign, IL 61820-5518
217-244-1099
slathrop@ncsa.uiuc.edu (Internet)
u13006@ncsagate (BITNET)

**Pittsburgh Supercomputing Center**
Robert B. Stock
4400 Fifth Avenue
Pittsburgh, PA 15213
412-268-4960
stock@psc.edu (Internet)
stock@cpwpsca (BITNET)

**San Diego Supercomputer Center**
Mark Sheddon
PO Box 85608
San Diego, CA 92186-9784
619-534-5130
sheddon@sdsc.edu (Internet)
sheddon@sdsc (BITNET)

For further information regarding NSF support of high performance computing, contact:

**The National Science Foundation**
Division of Advanced Scientific Computing
1800 G Street, NW
Washington, DC 20550
202-357-7558

twenty-five
Coursework Grants

A primary mission of the Pittsburgh Supercomputing Center is to train students, including undergraduates, on the proper use of supercomputers. One training method is coursework supercomputing grants, grants of FREE supercomputing time which supplement other teaching tools. Typically, coursework grants have been used for homework, problems in heavily quantitative courses, such as numerical methods, computational fluid dynamics, and computational chemistry, but we encourage faculty members from all fields of science, including the social sciences and humanities, to take advantage of these grants.

What a Grant Provides

A coursework grant provides the following:

- five service units on the CRAY Y-MP C90, renewable yearly, for use by the instructors and students in the course
- assistance in incorporating the vectorization and multitasking capabilities of a supercomputer into the course
- hard-copy and extensive on-line documentation
- access to all of the center's facilities, including scientific visualization hardware and software and an extensive set of computational software and biomedical databases
- all the other services provided to users of the center, such as assistance with network communications problems and access to our staff of user consultants and scientific specialists.

How to Obtain a Grant

To obtain a coursework grant, please send the following:

- a brief letter on your institution's letterhead requesting a grant
- a curriculum vitae of the primary instructor
- a course syllabus.

Send your request to:

Allocation Coordinator
Pittsburgh Supercomputing Center
4400 Fifth Avenue
Mellon Institute Building
Pittsburgh, PA 15213

Examples of Grants

Coursework grants have been used at PSC in the following courses:

- Computational Fluid Dynamics II
- Advanced Empirical Research in Finance
- Computational Engineering Software
- Applications of Parallel Computers
- Numerical Analysis
- Scientific Problem-Solving with Supercomputers
- Computational Methods in Engineering Research
- Supercomputing Hardware and Software Issues
Before ordering printed copies of publications, please try accessing them electronically on STIS (NSF's Science and Technology Information System), World Wide Web (WWW), or Gopher. Much of NSF's printed material is available electronically, including program announcements, the Guide to Programs, the Grant Proposal Guide and Proposal Forms Kit, the Bulletin, the NSF Phone Book, and press releases and tip sheets. Abstracts of awards for the years 1989 through the present are also available. Information on electronic access can be found in the flyer Getting NSF Information and Publications (NSF 95-64). To get an electronic copy of the flyer through Internet, send an e-mail message to stisfly@nstgov. If you don't have electronic access, use the form below to order a printed copy.

Single copies (printed) of publications listed in this Bulletin are available by returning the order form below to the NSF Forms and Publications Unit, Room P15, 4201 Wilson Boulevard, Arlington, VA 22230. Requests for publications can also be made by FAX, (703) 644-4278, or electronically via e-mail. When using Internet, address e-mail requests to pubs@nsf.gov, or order via voice-mail, (703) 306-1130. Requests must include the NSF publication number, the title, the number of copies needed, your name, and a complete mailing address.

Publications should be received within three weeks after placement of your order.

Check:
- [ ] NSF 91-38. About the National Science Foundation (In revision).
- [ ] NSF 93-112. Research Experiences for Undergraduates Program (rev. 7/93).
- [ ] NSF 93-143. Guide to Programs in the Division of Research, Evaluation, and Dissemination.
- [ ] NSF 94-1. NSF Annual Report, FY 1993 (Printed as an insert in the April issue of Frontiers).
- [ ] NSF 94-44. EHR Activities in Science, Engineering, and Mathematics for Persons With Disabilities.
- [ ] NSF 94-164. Division of Undergraduate Education Newsletter: DUE News.
- [ ] NSF 95-64. Getting NSF Information and Publications (Revised STIS flyer).
- [ ] NSF 95-66. Publications of the National Science Foundation.
- [ ] NSF 95-88. International Opportunities for Scientists and Engineers.
- [ ] NSF 95-118. Faculty Early Career Development (CAREER) Program Announcement.

Name
Address
FROM: Warren H. Groff  
TO: MARP Advisees  
RE: Sustaining Learning Communities in A Digital Era  
DATE: October 10, 1995

From Proposal to Chapters 1-3

Each of the three problem-solving methodologies has unique characteristics. "Development" assumes resources can be used to create, implement, and evaluate something new that will be qualitatively superior to what exists now. The tentative procedures in the prospectus are elaborated upon in the proposal. The procedures will focus on a literature review and strategies such as surveys, visitations, informed judgments, etc. It is not possible to predict with absolute accuracy all the activities and events that will occur while going through the development phases. The proposal will be a base upon which to build the first three chapters. After the proposal is signed, it is wise to begin to implement the procedures in the approved proposal. Converting the proposal to chapters and sections in the report can occur while procedures are being implemented. Advisees at the stage of converting the proposal to Chapters 1-3 are excellent sources of information about parallel processing. Participants in the early stages of proposal development can use the conceptual framework diagrams to help visualize the whole project. That will add clarity to the proposal.

The Changing Education and Training Paradigm

As stakeholders in the education and training enterprise, we have a wonderful opportunity to grow collaboratively in ways that would not have been possible just a few years ago. The "ENDS" of our efforts should be in client success expressed in restorative care leading to wellness, student learning outcomes for "High Performance Learner Workers," or increased productivity through know-how (total quality) and technology (advanced integrated and networked multimedia).

We directly or indirectly influence curriculum. Curriculum has three formats (a) CONTENT and CONTENT FORMATS, (b) DELIVERY SYSTEM FORMATS, and (c) EVALUATION FORMATS. CONTENT includes all the conceptual, interactive, and technical competencies and skills and processes to access databases through networks to attain and maintain high levels of effectiveness and efficiency in the emerging era. Content formats include all the various ways to organize the above-mentioned elements for culturally diverse learners of all ages -- by discipline or interdisciplinary, in classrooms and/or laboratories, "formal" learning or informal learning settings, etc. Content reform can involve voluntary standards in core subjects and 22 occupational skills projects. What are the competencies and skills that are necessary for electronic commerce in 2020? In 2010? In 2000? How do we prepare for the digital era?
DELIVERY SYSTEMS FORMATS began to become technology intensive in the 1980s. Imagine completing an undergraduate degree as early as 1984 and a masters degree in 1986 through your PC at home or at work.

EVALUATION FORMATS have expanded to include "authentic" and self growth assessments.

KNOWLEDGE-BASED PROBLEM-SOLVING formats are emerging from the application of state-of-the-art know-how and technology. New American School Development Corporation (NASDC) projects are attempting to develop new education paradigms and disseminate that know-how. At the two-year college level, the League of Innovation in the Community College and Jones Educational Networks formed a partnership and formed the International Community College that will use cable, computer technology, satellite and wireless technology to create a 21st century learning paradigm.

Dr. Robert K. Branson (1990) has pioneered the changing educational paradigms. School-based student learning was dependent upon a teacher-focused paradigm that was often discipline-centered and textbook driven. A limited range of know-how and technology has yielded the current paradigm. One critical issue is how to better manage contemporary traditional education while designing new world class systems which can yield better effectiveness and efficiency.

Terrence Overlock (1995) developed a multi-year plan for the integration of multimedia technology into the learning environment at Northern Maine Technical College (NMTC), an institution with cooperative tech prep programs with 36 schools in the Northeast one-third of the state. Imagine vertical articulation and horizontal integration within NMTC and possibly between one or more secondary schools in a 2+2. Imagine 2+2 articulation with most of the 36 high schools. Then, imagine 2+2 articulation with middle schools and high schools, followed with K-16 technology education.

What are the changing paradigm implications for Kenred's project in Jamaica or Shirley's project at Embry-Riddle? What are the implications for your project?

**Exemplary Seminar Papers and Practicums**

Students have written exemplary seminar papers on a broad range of topics. You can access some papers through ERIC. A list of 15 seminar papers was included in the Aug 29 memo. Several Human Resources Development practicums have focused on technology. Lists of selected HRD practicums and Computing & Information Technology practicums are attached.

**Future Electronic Classrooms**

Other ecrs will be in Classroom 12, from 7-9, Central Time.
- Oct 22 Converting Proposal to Chapters 1-3 (Cont.).
- Nov 5 and 19 Visualizing The Project (often last Appendix).
- Dec 3 and 17 Visualizing Chapter 4 and then Chapter 5.
Human Resources Development Practicums  
No date means "in process"

126. Pearley Cunningham, September 16, 1994
The Development of a Faculty Development Workshop on Computer Access to the Internet

159. Linda Austin Lutz, March 16, 1995
The Development of the North Carolina Information Highway Implementation Time Line at Catawba Valley Community College

165. Shirley Waterhouse, March 16, 1995
Development and Validation of an Intermediate-Level Faculty Seminar on Freelance Graphics.

167. Ernest H. Dammier, October 11, 1994
Evaluation of Computer Use By Faculty for Classroom Activities at Embry-Riddle Aeronautical University.

211. Shirley M. Gantt, July 14, 1995

215. Colin Murphy, Sept. 11, 1995
Development of Guidelines for the Creation and Use of Electronically Distributed Questionnaires at BMC Software.

223. Lester Hardegree, June 11, 1995
The Development of a Presentation on Multimedia at Armstrong State College.

230. Dustin Swanger, August 23, 1995
Evaluation of Rochester Institute of Technology’s Energizing Quality Network Day.

239. Douglas Ferguson
The Development and Design of a Model to Provide Clients the Strategic Planning Framework for the Introduction of Technology.

241. Lynn (Norman) Adams
The Development of Goals and Objectives for Computer Literacy and Proficiency at Bluefield State College.

BEST COPY AVAILABLE
Computing and Information Technologies Practicums
No date means "in process"

1. Carl Blakey Crowe, Emerging Technologies
   The Installation and Implementation of a Local Area Network
   at Wallace Community College Selma.

2. K. Kay Delk, Database Management, February 14, 1995
   Comparison of Students' Test Scores in Dbase IV as a
   Function of a Computer Tutorial versus Not Using a Computer
   Tutorial.

   An Evaluation of Graphical User Interfaces for the Extended
   Electronic Classroom.

   Development of a Conceptual Database Design to Maintain and
   Transfer Educational Records of Adult Migrant Farmworkers.

   An Evaluation of the Effectiveness of Fundamentals of
   English Computer-Assisted Instruction Curriculum on Hispanic
   Migrant Farmworkers Studying English as a Second Language.

6. Calvin L. Carpenter, Mg of Tech, Aug 13, 1995
   Development of a Survey to Assess the Telecommunications
   Needs of Leslie College Alumni.

7. Calvin L. Carpenter, Database Mgr, Sept 7, 1995
   Development of a Tutorial to Instruct Internet Users in the

   Development of an Internet Users' Manual for Faculty at
   Victoria College.

   Development of Videotape to Provide VA Employees with an
   Orientation to the Internet.

    Development of a Strategic Planning Model for the
    Information Systems at Briercrest Schools.

11. Keith Potter, Computer Info Networks
    Evaluation of Authoring Tools for Hypertext Markup Language
    Design.

    Development of a Database System for Collecting Student
    Feedback Responses Using A Bulletin Board System.
U.S. Department of Education's public Gopher/FTP/World Wide Web site

People with access to the Internet can tap a rich collection of education related information including general information about the Department, funding opportunities, descriptions of ED programs, directories of effective programs, a directory of education-related information centers, full-text publications, statistical tables, charts, and data sets, and pointers to public Internet resources at R&D Centers, Regional Labs, ERIC Clearinghouses and other ED-funded institutions. The Department's Internet site is maintained by the Office of Educational Research and Improvement (OERI). Internet users can access the information using a gopher client (gopher to gopher.ed.gov or select North America -> General -> U.S. Department of Education), a FTP client (FTP to ftp.ed.gov: logon anonymous) or a World Wide Web client such as NCSA Mosaic (URL=http://www.ed.gov).

Toll-Free Electronic Bulletin Board

Much of the information that is available on the Department's Internet site is also available to those who don't yet have Internet access but who can dial into a bulletin board. Statistical data, research findings and Department of Education information are all available on the toll-free electronic bulletin board. Computer users can retrieve this information at any hour using a modem (at speeds up to 14,400 baud) and calling 1-800-222-4922.

ED Board

The Department's Grants and Contracts Service operates ED Board, which provides on-line access to information about the Department's programs, current funding opportunities, and other information. Computer users can access ED Board at any hour by using a modem (at speeds up to 2400 baud) and dialing 202-260-9950 and via the Internet through FedWorld or the Department of Education's web server.
ERIC Clearinghouse on Information & Technology (ERIC/IT)

ERIC/IT is one of the 16 clearinghouses in the ERIC system, sponsored by the Office of Educational Research and Improvement, U.S. Department of Education. ERIC/IT specializes in educational technology and library/information science and processes documents in these areas for the ERIC database, the world's largest bibliographic database. The clearinghouse also provides user services and publications related to its scope areas, including the ERIC Network, and electronic "help sheets" for using ERIC resources on the Internet.

AskERIC

ERIC/IT runs an Internet-based question-answering service called "AskERIC." Teachers, administrators, parents, and community members with education questions may send them via e-mail to ASKERIC@ERICIR.SYR.EDU. A response is provided within 48 hours. AskERIC has also developed computerized resource collections of frequently-asked-questions, lesson plans, short summaries of recent research, and literature searches on popular topics.

ACCESS ERIC

This outreach and promotion component of the ERIC system is a bulletin board that is maintained on America Online. Available through the Teachers' Information Network of the Learning and Reference folder it includes general information about ERIC, the full text of brochures for parents and teachers, information packages with research syntheses and ERIC database searches, product announcements, and a message center. Call 1-800-LET-ERIC for more information.

Eisenhower National Clearinghouse for Mathematics and Science Education Projects

Ohio State University received a 5-year grant in 1992 to establish this clearinghouse, through which K-12 educators may access material and information, such as program or curriculum resources, federal funding, evaluations, and guides on math and science. By 1994, an electronic catalog will be available on CD-ROM and online. By 1996, the entire database will be searchable online and a user network will be in place. Contact Len Simutis, 614-292-1373.

National Institute for Literacy

The National Institute for Literacy is developing an Internet-based information and communications network. Its three functions are to conduct moderated discussions on literacy issues, provide a database of existing literacy related information in searchable form from multiple locations, and to provide a ready reference section of relevant data. The prototype is available at URL=http://novell.nifl.gov.

Goals 2000 Satellite Town Meetings

On the third Tuesday of each month, U.S. Secretary of Education Richard W. Riley hosts a live, interactive video teleconference for communities working to improve their schools and to reach the National Education Goals. Interested individuals may view the meetings at community downlink sites, by watching participating local public access TV, or on the Internet via CU-SeeMe. People can participate in the discussion by calling 800-368-5781 during the broadcast or by joining the Satellite Town Meeting On-Line Conversation, or "SATL-CON." To join, send an email message to <listserv@sunvm.syr.edu> and write "subscribe satl-con <your name >" in the body of the message. The transcript of the October Town Meeting on Technology is available in the Department's gopher and web sites. To learn more about the Goals 2000 Satellite Town Meeting, call 1-800-USA-LEARN.
TO: MARP Advisees
FROM: Warren H. Groff
RE: Sustaining Learning Communities in A Digital Era
DATE: October 16, 1995

* * * * * * * * *

We return to the place from which we started
and know it for the first time. T.S. Eliot

* * * * * * * * *

This memo is really about thinking through the conceptual
framework from problem statement through the final report.
Use conceptual framework sheets and think through the phases
from prospectus and/or proposal to (a) doing the project,
(b) converting the proposal to Chapters 1-3, (c) writing
Chapter 4, and then (d) writing Chapter 5 and the abstract.

From Prospectus & Proposal to MARP Report Chapters 3 ++
Several sections of the proposal are somewhat easier to
convert to sections of the MARP report. While developing
the proposal you identified several key issues for the
problem and wrote paragraphs for them based on a preliminary
review of the literature. You also described the context in
which the problem takes place. Following the procedures in
the proposal will take you on a journey that will reveal a
deeper awareness and understanding about both the problem
and its issues as well as the context in which it occurs.
Thus, these new insights should be included in the report.
A deeper understanding of the problem and its issues may
lead to a slightly different way or organizing Chapter 2.
Chapter 2 ends with a clear, concise summary of the research
that can possibly be used in slightly modified form in the
abstract or in the results section in Chapter 4, or even 5.

Development problem solving procedures will use several
different methods and techniques for gathering data and
information. The methods and techniques may include review
of models, consultations, interviews, questionnaires, and
surveys. Dr. Yng-chien Sheu used many methods and
techniques to collect data and information to create the
strategic plan for a Graphic Arts and Printing Technology
Department at National Taiwan Normal University. His
research questions dealt with mission and program goals;
curriculum; unique institutional characteristics including
communications infrastructure; students; faculty and staff;
and facilities, organization, administration, budget, and
evaluation systems. In addition to a comprehensive review
of the literature, he analyzed numerous graphic arts and
printing programs from several countries including the U.S.
He developed three survey instruments, one was sent to 30
administrators, a second survey was sent to 30 faculty, and
a third survey was sent to 120 corporate executive officers of graphic arts establishments in the Taipei area.

All data collected must be analyzed and transformed into some useable product based on approved procedures. The product could be for a curriculum for a course or an entire program, for a manual, etc. Information of little value may be excluded from the product for several reasons. However, all data must be accounted for in "Results" in some way that is easy to understand. Envision efficient and effective ways to present raw data, to convert data into meaningful and useable intelligence, and write narrative interpretation of facts in a "clinical" and "sterile" manner followed by clear tables. Discussion of the meaning is in Chapter 5.

The Changing Education and Training Paradigm

The changing paradigms focus attention on outcomes and the curriculum to produce knowledge workers of the 21st Century. What are the competencies and skills that are the content of world class learners and workers in an advanced technical era? What alternative content formats that could produce higher quality learner-workers? It is somewhat pointless to deliver inadequate content through contemporary technology. Similarly, it is somewhat useless to assess student learning outcomes of inadequate content. Also, where does the library and media center fit in the vision?

Enrollment Management systems must focus on "Student Success" and be adjusted as changes are made in the paradigm. An Enrollment Management System, the guides by the Council for the Advancement of Standards, and "Ten Characteristics of an Assessment Program" by the North Central Association of Colleges & Schools is in ED 351 499.

Ecr Recording. The Sei 24, 1975, ecr was recorded and is available in the archives. UNIX is case sensitive, so follow directions carefully to access the recording. Behind your UNIX prompt, type cd "ecr/GROFW" and then hit "enter" or "return." The UNIX prompt should appear again and type ecr -p/MARP1.950924. Then, try ecr -p/MARP2.951008.

Footnote. The strategic plan for a Graphic Arts Department was mediated through National Taiwan Normal University and submitted to the Ministry of Education. It was 1 of 30 proposals from over 200 applications that is now receiving funding from MOE. All of this was done in Chinese first. All of Dr. Sheu's seminar papers and practicums were done in the old PHE form and style. Dr. Shue's final report is in APA 3rd edition. Dr. Sheu's initial language was Japanese because Japan occupied Taiwan. His second language became Chinese. He learned English as an adult. His report was designated "Outstanding" (see ED 372 239, Appendix B3).
Office of Technology Assessment (OTA)

OTA will be phased out in the restructuring process. You may want to try to obtain some of the documents listed below.

Office of Technology Assessment
U.S. Congress
Washington, DC 20510-8025

(OTA-SET-379).
(OTA-SET-439).
(OTA-CIT-408).

Exchange of Information and Publications

A considerable amount of information is being exchanged. Also, I requested information be sent to you from about 40 organizations, some of which were in the Sept. 29 memo. Oulu, Finland, is using high technology: Business Week, Sept. 25, 1995, pp. 121-122.

Pearly Cunningham sent info on The Realities of Convergence. Dr. Joseph S. Kraemer used research by Apple and other corporations to conclude with a Vision 2000 that states "Finally, this is not only about corporate profits but about our way of life. An historical analogue would be the Industrial Revolution, but compressed into 15 years - not played out over a century. Hang on - this will be quite a ride." You may want Realities and Communications & Electronics Industries Consulting.

Dr. Joseph S. Kraemer, Managing Director
Communications and Electronics Industries Consulting
EDS Management Consulting Services
Suite 700, 1300 North 17th Street
Arlington, VA 22209
Tel. 703-908-3140 Fax 703-247-3468

Several advisees are working on projects that match programs for which funds can be obtained from the federal government. For example, the request for proposals for "Field-Initiated Studies Educational Research Grants Program" was released.

U. S. Department of Education
Office of Educational Research & Development
Washington, DC 20208
Fax 202-219-2030

Time Line for MARP

Dr. Brian Satterlee completed a MARP on program review and completed a display of his one year time line (ED 351 499).
More than 1,000 educators attended the Syllabus '95 conference, held this past July at Sonoma State University, in Rohnert Park, Calif. During the Plenary sessions, attendees heard presentations from leading experts in education technology along with panels covering multimedia, the Internet, and implementation and infrastructure. Breakout sessions included teaching faculty how to use technology in the classroom. All of the sessions listed below were professionally audio taped and are now available from Syllabus Press. Please fax or mail the order form below or call Syllabus Press at (408) 746-2000 for more information.

### Syllabus '95 Audio Tape Order Form

#### Prices
(minimum order is two tapes)

<table>
<thead>
<tr>
<th>Qty.</th>
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<th>Monday July 24: Focus on Multimedia</th>
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<td>Panel: “The Four Models of Instructional Technology Use”</td>
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<td>Panel: “Multimedia: A Faculty Perspective”</td>
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<td>Case Study, Meteorology: “How to Turn Chalk Dust Into Mouse Droppings”</td>
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<td>Case Study, Science and Pharmacology</td>
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<td>Case Study, English/Journalism: “The Classroom: The Next Generation”</td>
</tr>
</tbody>
</table>

#### Tuesday July 25: Focus on the Internet

|      |       | Keynote: “The Coming Challenge to the Internet Culture” |
|      |       | Panel: “The Impact of the Network on Education” |
|      |       | Panel: “The Internet and Teaching: A Faculty Perspective” |
|      |       | Case Study, Science/Anthropology: “The Evolution of New Media at California State University, Long Beach” |

#### Wednesday, July 26: Infrastructure/Implementation

|      |       | Keynote: “Technology Classrooms, Teaching, and Tigers” |
|      |       | Panel: “Creating Technology-Based Classrooms and Supporting Faculty” |
|      |       | Panel: “The Future of Technology in Education” |

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Mail this form to: Syllabus Press, 1307 S. Mary Ave., Suite 211, Sunnyvale, CA 94087 or FAX this form to: (408) 746-2711
TO: MARP Advisees
FROM: Warren H. Groff
RE: Sustaining Learning Communities in A Digital Era
DATE: October 26, 1995

It is a privilege to work with professionals committed to collaborating and sharing. The goal of SLCDE is to help each person to achieve a high quality learning experience. Kenred Christian made headlines in Jamaica with his project. Read Business Week, Sept. 4, 1995, pp. 24 and 70-77.

Context and "Electronic" Literature Review
Althea Stevens is developing a distance learning course for the Computer Science/Computer Information System at the McDonald-Belton Campus in North Platte, NE, one of three campuses of the Mid Plains Community College Service Area (MPCCA), that serves 18 counties covering 20,500 sq. miles. Issues include appropriate (a) content and content format, (b) delivery system format and (c) student learning outcomes evaluation format. There also is the appropriate evaluation procedure to compare student learning outcomes between students completing the course in a traditional format vs. the new multimedia format Althea will create in her project.

What content and content format are appropriate for learners of all ages in the MPCCA? The economy is primarily agricultural. What communication and information technology skills do current and prospective students need in the area? How can individuals in agriculture and agribusiness access information from databases via networks to grow better and more products? What databases are available through the U.S. Departments of Agriculture and Commerce and available in Nebraska? What content should be included in the CS/CIS program, particularly the course in the multimedia format? How can Althea access information that can be considered for the content? If the information is appropriate for the content of the CS/CIS course, how can she include it in the content format? These are a few of the ideas to search in an electronic literature review.

What delivery system formats are appropriate for learners of all ages in the MPCCA? What is the mix of software that is available? What is necessary for a learner to have a meaningful learning experience? How can the course be packaged and delivered? What and how can an electronic literature review be conducted to obtain the information? What is available through New Horizons In Adult Education, a refereed electronic journal (horizons@alpha.acast.nova.edu)? The same would apply to the two types of evaluations.

Perhaps one of the most important questions is "Who can help Althea or anyone else working on a project in which an electronic search makes sense?" The October 10 memo contained technology focused practicums completed for the
seminar in Human Resources Development and the practicums for the Computing and Information Technology specialization. There are many other options that you can pursue with peers. You can use TALK for a two person discussion. You can use Ecrs for three or more people by scheduling them in advance. You can record ecrs and place them in the archives. That would be particularly useful on an electronic search topic because of the discussion about selection of descriptors.

When you do a search, there is a way to record the route you took so you or someone else can follow it on a subsequent search. You would have a display very much like those in the August 23 memo which included examples of how to use the Infobahn to surf to (a) National Center for Research in Vocational Education, (b) Interface, and (c) a Learning Styles Network at St. John’s University.

Set a goal -- To attain proficiency in electronic search.
Obj 1. Search the above-mentioned ABCs by Thanksgiving.
Obj 2. Search something for your project, then share it.
Obj 3. Search other topics for your project and share them.
It is through doing and sharing that you become richer.

Exchange of Information and Publications
Apple and IBM have information that is useful. Addresses:
Information and Publications Ms. Raychelle Cooks
Apple Computer International Bus Machines
1 Infinite Loop 303 Alamadon Blvd., 7th Fl.
Cupertino, CA 95014 San Jose, CA 95110
1-800-776-2333 1-800-426-4338 x 2241

Grantsmanship. The Oct. 16 memo provided you with a source of funding. The Grantsmanship Center Magazine is free and often contains information about the Internet.

Ecr Recordings. The Sept. 24, 1995, ecr was recorded and is available in the archives. UNIX is case sensitive, so follow directions carefully to access the recording. Behind your UNIX prompt, type cd "ecr/GROFFW and then hit "enter" or "return." The UNIX prompt should appear and you type
ecr -p/MARP1.950924. The Oct. 8 ecr is ecr
To exit an ecr hit Ctrl c. To exit a classroom, hit Esc x.

Time Line for MARP
The memo dated September 4, 1995 contained a summary of time to complete various phases of the MARP process. That report had a typo. A corrected and updated summary is as follows:

<table>
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* Does not include two unusual circumstances of 31 & 36 mos.
# Low of 7 mos. was someone with a very clear MARP working full time with access to all NSU Western Office resources.
A call for high-tech classrooms

By Tamara Henry
USA TODAY

Business and education leaders Tuesday called for a major push to get America's schools on the information highway, stressing that student performance in math and science can soar with technology.

A report by the Committee for Economic Development says school districts can equip classrooms with computers, CD-ROMs, modems and on-line connections with an investment of $200 to $300 per pupil — less than 5% of the typical annual school budget.

"When technology is effectively integrated into mathematics and science education, it can raise the quality of teaching and the level of student understanding and achievement, just as it has made the high-performance workplace possible," says the report.

Technology is needed most in schools serving poor students, says the report. These students tend to have less access to computers and on-line resources with the work typically low-level, drill-and-practice exercises.

The report suggests some practical ways to obtain technology:

- Long-term budgeting, lease/purchase programs and recycled computers to provide schools with 1 computer for every 4 to 5 students. (Computer ratio now is about 1 for every 9 to 12 students.)
- Help from businesses or in-state companies.
- Regional centers formed from school districts that can obtain bulk-buy discounts complete with training.

Distance teaching to usher new era in education

IN the near future, more persons could have access to tertiary education without having to necessarily forfeit their earning power during that period.

The University of Technology, formerly CAST, and the Building Societies Association of Jamaica (BSAJ) are helping to herald in this new era, with this week's launch of a pilot Distance Education Diploma Programme at the institution. The formal agreement between UTech and the BSAJ was signed last week.

Speaking in an interview with JAMPRESS, the government's official news agency, Mr. K. Christian, head of the Commerce Department at UTech, said the programme was aiming to achieve greater quality, cost-effectiveness and flexibility in delivery for off-campus as well as on-campus students, while providing the opportunity for students to become self-directed.

He explained that the programme, which was initially aimed at employees in building societies which were members of the BSAJ, would have elements of classroom teaching, in addition to self-instructional material, a strong thrust of consultation with tutors outside of the classroom setting, and continuous assessment.

Programme

Some 25 students are enrolled in the programme, which will run for four years on a part-time basis and involve courses such as, accounts, information technology, communication, and mathematics and statistics. Upon completion, students will be awarded a Diploma in Business Administration.

Mr. Christian pointed out that the programme would be attainable at the same fees as the regular part-time programmes offered at UTech.

The pilot programme is the first stage in the implementation of a long-term plan to make university education accessible throughout Jamaica and the wider Caribbean, he pointed out.

President of UTech, Dr. Alfred Sangster, in his remarks, cited the new programme as one of the responses to the concern regarding tertiary education in the Caribbean.

Pointing to a need for dynamism in finding solutions, he indicated other efforts being made by UTech to find creative solutions to the problem. In bringing greetings, Dr. D. Irvine, representative of the Commonwealth of Learning noted that the programme was a partnership between the supplier and consumers of education, pointing out that this ought to be a constant feature of education delivery.

While individuals had a part to play in acquiring an education, Dr. Irvine stressed that employers should help to promote and facilitate learning.

Mrs. L. McDonald, chairman of the BSAJ Training Committee also brought greetings.
**Explores the Internet**

**Online resources for nonprofits**

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### Issue #27 - Summer 1995

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  - Families
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  - Hearing-Impaired/Visually-Impaired Persons
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We are made wise not by the recollections of our past but by the responsibility for our future.

George Bernard Shaw

Envisioning the Entire Project

The Prospectus authorizes pursuit of a topic via a Proposal intended to be a well conceived action plan for a project that is based on a somewhat extensive analysis of research. The analysis of the literature provides additional clarity of (a) the context and the problem, (b) issues related to the problem, and (c) specific activities and steps that can be considered for various procedures. The review of the literature for the proposal may represent from about 50 to 80% of what will be included in the report. The analysis of exemplary projects, literature and research in a development topic will continue throughout the lifespan of the project because new information becomes available. That is particularly true for projects about technology and the resources that are becoming available in electronic format.

The Proposal stage provides a researcher an opportunity to envision the whole project through a conceptual framework and then write an action plan using PHE format requirements. A clear concise statement of the problem, context and issues, is necessary, but insufficient. A high quality proposal requires a clear vision of the entire project. The procedures represent a set of actions (activities, events, and sequence of steps) to be followed during the project. This brief discussion will build on several ideas presented in the Oct 26 memo. Because several advisees are envisioning their projects and other advisees are writing Chapters 4 and 5 in their final report, several paragraphs below are intended to meet the needs of both groups.

While a researcher is thinking through the project, it is possible to begin to anticipate how each procedure in Chapter 3 could appear in Chapter 4. Several advisees are converting a course from a traditional format to a multitech format. A first research question could be "What is an IDEAL model for a computer-based online course in ...?" Procedures in Chapter 3 could include a comprehensive literature review of research available in electronic and traditional formats, a survey of other institutions, and a presentation of your synthesis of all this information to a curriculum committee or a formative evaluation committee? How you would do it is itemized in Chapter 3 in the proposal and you will achieve greater clarity in the narrative when you anticipate how the "factual" results of having gone through those steps could appear in Chapter 4 of the report.
The Oct 26 memo discussed the context of the Mid Plains Community College Area in NE and the logic of including an electronic commerce learning module on agriculture and agribusiness in the Computer Science/Computer Information Systems course that Althea Stevens will convert from a traditional to a nontraditional format and deliver in MPCCA. Phillip Davis and Kay Delk are working on similar projects. All three will need to analyze the three formats of curriculum (a) content and content format, (b) delivery system formats, and (c) student learning outcomes evaluation formats. Also, all three individuals will need to analyze the unique consumer needs and wants in their area -- MPCCA; Del Mar College in Corpus Christi, TX; and Seminole Community College in Seminole County, FL. In addition, all of these individuals will need to analyze the research on how to evaluate traditional vs nontraditional courses and curricula, with unique emphasis on computer based distance education. I will continue to discuss procedures of the conversion of curriculum and then comment on collaboration.

The procedure of converting from traditional to a multitech format is NOT simple. I taught Leadership I in another doctoral program four times before I began to convert the seminar to a multitech format with a few learning modules delivered online beginning in 1991. I had to rethink the goals and objectives for Leadership I and then match them with the available technology. Then, I had to develop the materials to take advantage of the unique features as well as the limitations of each technology. When creating an "electronic classroom," what should be presented in a series of structured frames and how should they be organized for the students (in this case, professionals like yourselves)? How does one evaluate learning outcomes in an online format? How did I compare traditional vs multitech delivery systems? (This work is available in ED 357 829 and elsewhere).

Pearley Cunningham, Shirley Waterhouse, Richard Smith, and Shirley Gantt are working on related projects. Pearley is going to develop a strategic plan to deliver the electronic engineering program via technology to the four campuses at the Community College of Allegheny County, around the city of Pittsburgh, PA. Shirley Waterhouse is co-creating a plan for implementing faculty educational technology resource services at Embry-Riddle Aeronautical University; the major technologies will include distance learning, multimedia, and use of Internet for collaboration. Richard is going to co-create an interactive multimedia developers procedure manual for use by instructional systems designers at Lakeland Regional Medical Center, a 895 bed, acute care medical center offering multiple specialty services in Lakeland, FL. Shirley Gantt will co-create a strategic and operational plan for incorporating an integrated information system by Dynacom into instruction at Carroll Technical Institute in the western sector of metro Atlanta, GA.
Other peers are working on projects that may be important to you. Howell Wright is working on a project to measure the degree to which workers of the Internal Revenue Service use knowledge received from formal training sessions on the job. Evaluation, however defined and at whatever level, is a comparison between anticipated expectations and outcomes, some of which may be short term and others are long term. From an Organization Development (OD) perspective, what are the stated goals and objectives and the effectiveness and efficiency to which they are achieved. And, to what extent can the results be attributed to intervention strategies.

Human Resources Development (HRD) is a training intervention strategy, as is the use of know-how, like Total Quality Management (TQM), and the use of technology. What are the competencies and skills of employees in various positions and what are the standards to be attained and maintained? What TQM competencies and skills should employees attain and maintain to achieve Continuous Quality Improvement (COI)? What technological skills are needed by employees for a reasonable return on investment (ROI)?

Howell will be selecting a program to evaluate. Imagine the amount of electronic commerce, domestic and global, that the IRS had to prepare to audit and for which training programs had to be designed and conducted. What ROI did we taxpayers receive? Howell will be developing a guide for evaluating programs and selecting a site to pilot the guide. Howell can analyze HRD handbooks practicums by peers. The federal government has been promoting TQM for the past several years and there are reams of information available. Some of the information is online. If he decides to develop guidelines and an evaluation tool for a TQM training program, branches of the military and corporations willingly share material. Furthermore, Marvin Smith and Ron Carney are working on TQM MARPs. Marvin’s proposal was approved and Ron is working on his proposal, which is a handbook for a technical institute in Georgia. Do evaluation and COI/TQM fit into your project? If so, you have peers to talk with.

Several advisees are collaborating on items of substance, such as the above-mentioned topics, as well as on complying with 4th edition of APA.

A Proposal is a narrative presentation in excellent English of a conceptual framework in your mind that you communicate in an articulate, coherent, sequential way to a committee. An advisor provides assistance in clarifying the conceptual framework of the project, often by raising questions about the nature of the problem (context and issues), the research questions, and the methodology and procedures. A mature researcher realizes that the first draft of a document as significant as a proposal for a major applied research project will have to be rethought and rewritten several times until it is the best in excellence in scholarship. Thinking through Chapter 5 adds still more clarity.
**Finger Command.** To find out someone's user code (login name), type finger followed by the person's real name at the prompt (i.e., % finger warren groff & hit enter or return).

**Surfing to Resources.** The Aug 23 memo indicated how to Gopher to information and made reference to interface by Holly Jobe. The Nov/Dec issue has many fine interest items. Set a number of "surfing" goals during Thanksgiving break. Practice using TALK and use it for communicating with peers.

**Ecr Recordings.** To access the Nov 5 ecr recording, behind the UNIX prompt, type cd ~ecr/GROFFW and then hit "enter" or "return." The UNIX prompt should appear and you type ecrt -p/MARP1.951105. Previous recordings are:
- Sept. 24, cd ~ecr/GROFFW, then type ecrt -p/MARP1.950924.
- Oct. 6, ecrt -p/MARP2.951008.
To exit an ecr hit Ctrl c. To exit a classroom, hit Esc x.
If you have technical problems, contact the HELP desk.

**Center for Computer and Information Sciences.** Individuals have asked about CCIS. Program info can be obtained by calling 1-800-986-2247. CCIS programs are:
- M.S. in Computer Information Systems.
- M.S. in Computing Technology in Education.
- Ph.D. or Ed.D. in Computing Technology in Education.
- Ph.D. in Information Systems and Science.

**Celebration** is a new high tech community of the future in Florida that is being developed by Walt Disney and AT & T (Home Office Computing, Oct. 1995, v. 13, n. 10, p. 136). An excellent article on community networks can be found in Internet WORLD, Dec. 1995, v. 6, n. 12, pp. 88-95.

Chong-Sun Hong has completed An Action Plan for the Use of Innovative Approaches in English Education at Hankuk Aviation University, Seoul, South Korea. As Head of the Foreign Language Institute at HAU, she will be able to influence language development at all levels. In addition, the innovative approaches could be useful to other colleges and schools. Imagine the opportunity to take An Action Plan for the Use of Innovative Approaches in English Education and conduct a series of seminars and workshops for English teachers at secondary schools and two-year colleges in Seoul. Then, imagine a few computer and engineering faculty from two-year colleges and HAU enrolled in CIT & VTO to co-create a 2+2+2 network in South Korea to deliver English modules to schools. Chong-Sun Hong is our first graduate who lives in South Korea.

The next ecr is Sun, Nov 19, 7:00 Central Time, Classrm 12. Other ecrs will be held on Dec 3 and 17.

**HAPPY THANKSGIVING**
TO: MARP Advisee
FROM: Warren H. Groff
RE: Sustaining Learning Communities in A Digital Era
DATE: November 24, 1995

We must be the change we wish to see in the world. --Ghandi

More Envisioning of the Entire Project
Collaboration on visioning a major applied research project at all phases & stages is beneficial for all professionals. All professionals working on any project can benefit through communications with others. Individuals with reports in the Outstanding Practicums and Major Applied Research Projects are a great resource because of excellence in research and format. The August 29 memo noted Christine Loftin’s work. Chris benefitted from conceptual frameworks about "full service" caring and learning models produced by peers in the Child and Youth Studies (CYS) doctoral program. Chris’ work was shared with professionals in CYS and in PHE. Imagine the potential if collaboration were promoted electronically by all NSU programs and with other graduate programs.

Terry Overlock is near the completion of his MARP and will be involved in new levels of collaboration. Terry’s project was a plan for multimedia technology. As a result of several presentations to the Administrative Council and the Strategic Planning Committee, Terry dealt with concepts in curriculum, human resources development, organizational development, and technology. Curriculum is the heart of the learning enterprise. How can "formal" learning be made more effective and efficient in business and industry, colleges and schools, health care systems, and the military and government? How can we achieve more "Return On Investment" by exploiting know-how and technology? How can we learn to learn "New Habits of Heart and Mind" and create and sustain learning communities in the emerging global village?

Strategic planning is a know-how technology intended to help an establishment create visions of the future that are then interpreted into strategic directions and into goals. How can we help employees understand advances in technology and then interpret them in terms of implications for programs? Examples are presented of modernization as a prelude to a discussion about restructuring and reengineering projects.

The Council of Independent Colleges was engaged in creative strategic planning (SP) projects in the 1970s. CIC research indicated that SP required an audit of the internal context and an assessment of the external context to create visions of the future. Assumptions should be specified as a prelude to establishing strategic areas of focus as a prelude to setting goals and objectives to which resources are related. The planning and budgeting processes must be integrated. Broad based planning processes are needed to empower people.
North Central Technical College began strategic planning in 1977-78. NCTC completed an audit of its internal context and an assessment of its external context. Contextual variables which were extrapolated through the 1980s for business, engineering, health, and public service programs. Then, assumptions were specified using ten categories at institutional and program levels. NCTC then specified strategic directions in three major categories:

1. Information Processing
   A. Computer Literacy
   B. The Office of the Future or the Paperless Office

2. Electronic Delivery of Educational Programs and Services
   A. Interactive Diagnostic and Instructional Systems
   B. Telecommunications and Teleconferencing Systems

3. High Technology
   A. Advanced Machine Tool Design
   B. Microelectronics
   C. Robotics
   D. Lightwave Circuit Technology

NCTC also co-created a conceptual framework which positioned data and information processing at the core of the business of primary and support programs (see Attachment 1).

Computer literacy competencies were specified for employees, programs, and students. "The Office of the Future" was interpreted as workplaces of the future. Program advisory committees assisted full-time and part-time faculty to anticipate the evolution of technology, the rate of adoption of technology and the implications for programs. For example, what technologies are being considered for use by businesses in the college's service area and what are the competencies and skills that graduates should have for entry into the workforce? What technologies are being used in engineering technologies from computer aided designing (CAD) through computer integrated manufacturing (CIM)? What technologies are being considered for a continuum of care extending from health promotion through tertiary care? Identification of technologies and the specification of competencies and skills of graduates provides a framework for many other decisions for qualitative improvements.

Assumptions about future conditions were specified for each unit using 10 categories and were analyzed each fall. Goals and objectives were specified using seven categories and progress made on goals and objectives was evaluated at the end of each fall, winter, and spring quarter. Operating dollars were linked to objectives. An Enrollment Management (EM) plan was developed for recruitment and retention along with a detailed Functional Analysis and "Multiple Ways for Obtaining Academic Credit." A Comprehensive Learning Center was developed. NCTC created formal articulation agreements, including a 2+2+2. An Ohio Technology Transfer Organization agent reported to the Vice President for Academic Affairs. This information is available in ED 351 499 and ED 372 239.
Primary Programs

HEALTH CARE

Health Promotion | Primary Care | Secondary Care | Tertiary Care

Support Program

Strategic Planning, Management, and Evaluation

Market Analysis |  |  |  | Outcomes and Impact Analysis
Shelby State Community College engaged in strategic planning in 1986-87 that created a Middle College High School on the Midtown Campus. MCHS began operations with 82 10th grade students in fall 1987. In fall 1988, an additional group of sophomores were admitted and some of the juniors completed high school graduation requirements while taking college freshmen courses. This form of reengineering makes vertical articulation more efficient between layers of bureaucracy. SSCC also adopted the competencies specified by the College Board and converted from a quarter to a semester format. SSCC also created an Entrepreneurial Development Institute.

SSCC created an Enrollment Management (EM) system around the concept of "Student Success." EM is a generic concept that relates to (a) a philosophy of customer service and (b) a continuum of services extending from advertising, marketing and recruitment through inquiry responses, admissions, enrollment services, registration, retention, and consumer follow through. What are the central issues relative to the development of a high quality philosophy of customer service or to any aspect of the continuum of services? The SSCC EM system included institutional outreach, inquiry response, admissions, enrollment services, registration and retention and broad stroke functions were listed for each area. The "IDEAL" was specified for each of these functions. A detailed functional analysis was completed for the existing organization as a prelude for specifying an action plan. Enrollment increased for the next several years. ED 335 519 contains the (a) EM plan with the functional analysis, (b) Council for the Advancement of Standards for student services/development programs, and (c) "Ten Characteristics of an Assessment Program" by the North Central Association of Colleges and Schools (1991 edition).

The strategic planning process yielded a conceptual framework in spring of 1987. Communication and information technologies were viewed as being at the core of the learning enterprise. A Comprehensive Learning Center would offer courses in an "open entry - open exit" self paced format in communications, computational, natural and social sciences, and other skill areas. An Instructional Resources Center would assist faculty convert traditional courses to distance education formats. A Communications and Information Center would assist faculty in the delivery of distance education courses. Career Information Services would ultimately deliver campus based services to community agencies and homes. SSCC was also engaged in planning "The Library of the Future." The process and plan were presented to the Commission on the Future of Community Colleges as "The Learning Community of the Future" in 1987 (ED 280 538). In 1992, a student in the Springfield, MO, cluster took the conceptual framework and created a vision and action plan for a "Center for Effective Learning" (see Attachment 2).
COMPONENTS OF A HUMAN RESOURCES DEVELOPMENT SYSTEM

Career Information Services

Counseling and Advising
Assessment
Career Life Planning
Telecommunications
Downlink and Uplink
Communications and Information Technology Laboratory
Library Access Storage Retrieval
Competency Evaluation Formats

Communication and Information Technologies

Natural and Social Science Skills
Other Skill Areas
Curriculum Content Formats
Delivery System Formats

Instructional Resources Center

Comprehensive Learning Center

Communications and Information Center

English, Second Language
Study Skills (7 sections)
General Psychology
Sophomore Seminar
Mental Health
Literacy

Computer Programs

Math
ACT
Reading

Video Labs

GRE
Study Skills
Self-Esteem

Teacher Education

C-BASE
ACT

Personnel:
(1) Assoc. Professor
(1) Asst. Professor
(3) Tutors
(1) Secretary

Center for Effective Learning

Comprehensive Learning Center

Career Counseling
Community Counseling
Career Placement
Tutoring

Organiization Flow Chart of Current and Projected Responsibilities and Personnel of the Center for Effective Learning

1992, Fall
Private sector manufacturing establishments that survived the 1980s, modernized several times with wave after wave of contemporary technology for (a) production and distribution of goods and (b) management of the establishment. However, despite massive investment in information technology (IT) over the past 25 years, industry finds it difficult to demonstrate effectiveness outcomes in terms of increased competitive advantage, economic productivity, and market share when compared with the European Union and Pacific Rim. Statistical Process Control (SPC) and Statistical Quality Control (SQC) were techniques that were applied to the manufacturing of goods and were the basis of the total quality movement. The total quality movement received a great deal of impetus by the Malcolm Baldrige National Quality Improvement Act of 1987 (Public Law 100-107). Of the relatively small number of establishments that have attempted some form of total quality initiative, only a few claim significant improvement. An Arthur D. Little report indicated that many corporations have abandoned efforts in their TQ projects. Private sector establishments began to fundamentally restructure in the late 1980s and 1990s.

As we move "Toward the 21st Century." what lessons from the past several decades should shape our "New Habits of Heart and Mind?" Second, what are the significant issues that we must consider in major applied research projects?

Lesson #1. We are beginning to recognize the centrality of learning and Human Resources Development (HRD). Humans are our most important resource. However, most employees have not participated in a critical analysis of mission and only a small percentage of employees have co-created visions.

Lesson #2. Access, quality, and cost have been significant issues that are becoming increasingly more important. Access a few years ago dealt primarily with being able to take a course. Access to contemporary technology to acquire skills needed to work is already a civil rights issue. How can education and training, K through postgraduate, be of high quality when the curriculum only talks about technology, but does not use it or require demonstrated competence in it? What competencies should be required?

Terry Overlock is completing his MARP Report. Like the T.S. Eliot quote, "We return to the place from which we started and know it for the first time." He now has the opportunity to work with the Administrative Council and the Strategic Planning Committee to implement the strategic plan for multimedia technology. What strategies and techniques can Terry use to assist NMT and the 36 school districts in northeast Maine to create plans for a borderless and seamless solution based learning paradigm on demand (see Attachment 3)? Terry has shared work throughout his MARP and will be a valuable resource during implementation.
BORDERLESS & SEAMLESS SOLUTION BASED LEARNING

ADULT YEARS
SECONDARY YEARS
MIDDLE YEARS
EARLY YEARS

BIOTECHNOLOGY
COMMUNICATIONS
CONSTRUCTION
ENGINEERING
MANUFACTURING
TRANSPORTATION

CONTINUOUS QUALITY IMPROVEMENT BENCHMARKS
TO PRODUCE HIGH PERFORMANCE LEARNER WORKERS

1/2/92
Lesson #3. We have underestimated advances in communication and information technology and impact on humans and work. Comdex helped to usher in a new era in computing, coming full circle in computer technology. In the 1970s, computers were mainframes that we tapped into through dumb terminals that had no processing power on their own. In the 1980s, personal computers evolved from desktops to laptops and first generation "portables" that had (a) a limited number of ways of inputting and accessing data and producing output in one language and (b) tethered by wires. The 1995 Comdex trade show featured a new era in which PCs connect through networks with a much greater array of input, process, and output capability with multiple languages and wireless. That is state-of-the-art today. What about the year 2000?

Shirley Waterhouse is making excellent progress on her project. She is creating a strategic plan for implementing faculty educational technology resource services at Embry Riddle Aeronautical University. The technologies include distance learning, multimedia, and the use of Internet for collaboration. ERAU is a world leader in aviation and aerospace education with an eastern campus in Daytona Beach; a western campus in Prescott, AZ; and continuing education services on many military bases throughout the world. What strategic directions has ERAU set with goals and objectives for the three areas? What strategies and techniques can be used for HRD to achieve goals and objectives? How can Continuous Quality Improvement (CQI) with benchmarking be incorporated into the multi-year action plan? How can you contribute to Shirley's project through collaboration?

Richard Smith will have his proposal approved soon. He has a conceptual framework for The Development and Validation of an Interactive Multimedia Developers Procedures Manual for Use By Instructional Systems Designers. What are the strategic directions for Lakeland Regional Medical Center and what goals and objectives have been set for health and medical education? What strategies and techniques are used to raise the level of awareness about the use of technology to enhance learning? What interactive multimedia authoring software technology exists that could be considered for use at LRMC? How would you co-create a procedures manual to enhance the likelihood that it will be used by instructional systems designers and will achieve consumer and provider student learning outcomes? How can you contribute to his project through collaboration? We will discuss the framework briefly during the ecr on December 3. You and he can agree on a time and enter TALK during the week of Dec 4-10. We will then discuss the results of the experience during the ecr on December 17. The discussions should add clarity to conceptual frameworks, could yield effective instructional development models, and net a series of project management displays. Imagine the follow through collaboration via ecrs and TALK after Dec 17.
Computer Based Online Learning

Contemporary
Policy
Mission Priorities
Strategic Alliances
Curriculum
Student Learning Outcomes
Technology
Human Resources Development
Fiscal Resources

Next Generation

POLICY
MISSION PRIORITIES
STRATEGIC ALLIANCES
CURRICULUM
STUDENT LEARNING OUTCOMES
TECHNOLOGY
HUMAN RESOURCES DEVELOPMENT
FISCAL RESOURCES

Current Paradigm
Teacher
Experience
Fixed Schedule
Classroom Based
Student

Technology-Based Paradigm
Teacher
Experience
Anytime
Anywhere
Anyplace
On Demand
Knowledge
Knowledge Database
Communications
Learning Management
Student Centered
Outcome Based
Student
Experience
Knowledge
Knowledge
Experience

Transition to the Future??

Changing Paradigms


Note: Adapted from Branson, R.K. (April, 1990). Issues in the design of schooling: Changing the Paradigm. Educational

ERIC
Can collaboration involve your peers in S. Korea and Taiwan? Young G. Kim is chair of the Department of Computer Science at Incheon National University of Education. He has started an HRD practicum Development of a Guidebook for Computer Assisted Instruction and Courseware for Elementary School Teachers. He would welcome ideas and resources.

Young Gi Kim gikim@alpha.acast.nova.edu
7-411 Kyung-Nam Apt., Banpo-Dong
Secho-Ku, Seoul, Korea 137-042

Dr. Niann-Chung Tsai was the first PHE graduate in Taiwan. He was on leave from the World College of Journalism and Communications in 1992-93 and lived in Phoenix. He passed the comps in fall of 1992 and by December had a prospectus to develop a strategic plan to convert a traditional program to a non-traditional format. Niann participated in an ecr with a few professionals from the Child and Youth Studies (CYS) doctoral program and PHE on January 3 to discuss centralized planning in Taiwan and decentralized decision making for education in the U.S. Niann visited with peers completing the CYS program and traditional and multi-tech formats. His proposal was signed in Feb. We conducted a strategic planning workshop at WCOJC in Taipei in March that resulted in the selection of the telecommunications program. We discussed non-traditional programs with Dr. Kirby Yung, Deputy Minister of Education (MOE). MOE had a policy that prohibited nontraditional education. Niann’s report was signed, June 1993. A proposal to implement nontraditional education at WCOJC was sent to MOE. Niann was appointed chair of the Telecommunications Department last spring. His e-mail message of Nov 20 indicated WCOJC is implementing his MARP. His addresses are nctsai@cc.wcjc.edu.tw and Dr. Niann-Chung Tsai
#17-1, LN 145
Shin Sheng S. Rd, Sec. 1
Taipei, Taiwan
REPUBLIC OF CHINA

Strategic Planning consists of a contextual analysis (internal audit and external assessment) for the purpose of creating visions of the future that yield strategic direction and goals and objectives to which resources are allocated. Establishments can alter mission, programs, people, and technology. Curriculum is the heart of the learning enterprise and is comprised of content formats, delivery system formats, and behavioral evaluation formats. How do we strategically plan to shift from the contemporary model to computer based online learning (see Attachment 4)?

Nine PDAs and Palmtops are compared in Mobile Office, Dec 1995, v. 6, no/ 12, pp. 52-71.

Our ecrs on Dec 3 and Dec 17 will begin to set the stage for a formative evaluation of this collaborative activity.
STRATEGIC HUMAN RESOURCES DEVELOPMENT

Thinking within a fixed circle of ideas tends to restrict the questions to a limited field. And, if one's questions stay in a limited field, so also do the answers.


The August 23 memo contained a few comments about creating learning communities and human resources development (HRD). Two lists of technologies were included in a display to help envision one aspect of HRD, that of trying to understand how the technologies will evolve over the next few years and how to interpret their implications for education-training. The memo included a framework to focus on strategic thinking by highlighting the need for leadership to consider both organizational development (OD) and HRD components. Major OD components were listed as mission, primary programs (certificates and degrees), and secondary support programs. Areas that relate primarily to OD embrace climate/culture and institutional effectiveness that include centralization vs decentralization of policy, decision making, and "rules." Examples are abundant. Florida and Pennsylvania each have 67 counties. Florida has 67 county school systems while PA has 501 school districts. Maryland also has county school systems. Montgomery County, MD, is one school system while Montgomery County, PA, has 22 school systems. Imagine the variability in private and public postsecondary education and the different approaches to HRD in the private sector.

Mission, Programs, People, and Technology/Know-How.

**CLARITY IN PRIORITIES AND OD-HRD INTERVENTION STRATEGY**

<table>
<thead>
<tr>
<th>Categories of Variables</th>
<th>Pre Strategy</th>
<th>Intervention Strategy</th>
<th>Post Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>MISSION (Produces &amp; Quality)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRIMARY PROGRAMS</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>SECONDARY SUPPORT PROGRAMS</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>PEOPLE (Providers &amp; Stakeholders)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TECHNOLOGY (and Know-How)</td>
<td></td>
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</tbody>
</table>
Strategic HRD via Mission Review & Visions Co-creation

All establishments need a clear, concise mission statement about the business and essential purposes of the enterprise. A mission statement is necessary, but it is insufficient. WHAT business the enterprise is conducting needs to be accompanied with a business plan of WHERE it is heading. From an HRD perspective, most service providers and stakeholders have not critically analyzed the mission statement and only a very few have ever participated in modifying or creating a mission statement. Unfortunate as that is, even fewer have been active participants in a high quality strategic planning process. Fewer yet have ever participated in a visions creation or a scenario development process. Imagine the empowerment that can occur when providers and community stakeholders are active participants in a world class envisioning the future process.

One part of the contextual analysis is the assessment of demographic, social, economic, technological, and government variables in the external environment. How do you envision technological advances over the next few years?


Asynchronous Transfer Mode
Cellular and Wireless
Desktop Conferencing
Distributed Digital Video
High-End Portables
Mobile Computing Solutions
Smart & Voice Activated Techs.
Workgroup Collaboration

The contextual analysis phase should yield (a) lists of strengths, weaknesses, opportunities, and threats and (b) a process of matching strengths with opportunities. Setting a limited number of strategic directions could occur soon after the task of matching strengths with opportunities or the task could be deferred until after visions and scenarios co-creation. When an excellent strategic planning process is co-created and implemented, a limited number of active participants will raise their level of understanding of the future for their area of responsibility. How would you design a visioning experience to help other stakeholders understand the broader social issues and the benefits of the HRD strategy of strategic thinking about the 21st Century?

Setting priorities and creating a conceptual framework for action plans could follow visions creation and may change a mission. For example, because technological skills are becoming increasingly more important, several states are implementing K-16 technology education programs, converting area vocational-technical schools into institutes, upgrading technical institutes to colleges and using other strategies. How would you achieve consensus on mission priorities?
CLARITY IN PRIORITIES FOR OD-HRD INTERVENTION STRATEGIES

Pre | Intervention | Post | Strategy
--- | --- | --- | ---

**Categories of Variables**

**MISSION**
- Retain Mission
- Focus the Emphasis
  - General Education
  - Transfer Programs
  - Occupational Programs
  - Community Service
  - Remedial & Developmental
  - Research & Development
  - Technology Transfer
- Alter Mission

**PRIMARY PROGRAMS**
- Core General Education
  - Communication
  - Computational
  - Natural Science
  - Social Science
  - Technology
- Certificate and Degree
  - Business
  - Education
  - Engineering
  - Health
  - Public Service
  - Seminary & Theology
- Support for Primary Programs
  - Library & Media Center
  - Comprehensive Learning Lab
  - Instructional Materials Lab

**SECONDARY SUPPORT PROGRAMS**
- Student Services
- Administrative Services

**PEOPLE**
- Board Members
- Full Time Faculty
- Part Time Faculty
- Staff
- Administrators
- Legislators
- Other Stakeholders

**TECHNOLOGY (and Know-How)**
- Strategic Planning
- Continuous Quality Improvement (CQI)
- with Benchmarking
- Technology Plan
Strategic HRD in Primary Programs

The Oct. 10 memo focused on three components of curriculum: (a) CONTENT and CONTENT FORMATS, (b) DELIVERY SYSTEM FORMATS, and (c) EVALUATION FORMATS. The evolution of competency-, performance-, outcomes-, and problem-based learning over the past 30 years is a research project by itself. A list of projects is located in report ED 372 239, p 124. Business and industry, health care, and the military have led in the movement because their competitive edge is dependent upon employees having contemporary competencies. Formal "schooling" lags behind the other HRD establishments.

Curriculum to Produce Knowledge Workers of the Future

Many projects impact the three curriculum components. This analysis, however, will list projects under two components.

CONTENT and CONTENT FORMATS. Numerous groups have specified world class standards for core subjects of math, science, history, arts, civics, geography, and English (ED 361 531, 1993, Appendix B). The Secretary's Commission on Achieving Necessary Skills (SCANS) reports have workforce skills that are essential (ED 372 239). The U.S. Departments of Education and Labor funded 22 occupational skills projects that specified critical competencies for workplace needs. The Advanced Technological Education (ATE) program promotes exemplary improvement in advanced technological education. The ATE program is managed by the Division of Undergraduate Education and the Division of Elementary, Secondary, and Informal Education of the NSF (703-306-1636).

Developing A Curriculum (DACUM) is a process that has been used by educators for synchronizing content with workplace skill requirements. The Center for Education and Training for Employment at The Ohio State University completed a DACUM with the Illinois, Ohio, and Pennsylvania Departments of Education for career related teachers (1-800-848-4815).

Almost all nations are engaged in a process to envision life and work in the 21st Century and identify the competencies and skills necessary to produce knowledge workers for the emerging global economy. In 1990, the Organisation for Economic Co-operation and Development (OECD) launched a program on the changing role of vocational and technical education that yielded Vocational Education and Training for Youth: Towards Coherent Policy and Practice (1994). Also, the Southeast Asian Ministers of Education Organization (SEAMEO) implemented "A Scenario for Education in Southeast Asia in the Year 2015" which led to Building Scenarios for Education in Southeast Asia: The SEAMEO INNOTECH Experience (1993) that made extensive use of futures research including research by Ford that highlights important shifts in HRD. "A Vision of IBM Human Resources Performance in the year 2000" was analyzed by Charp; she published a set of new direction in education (ED 372 239, pp. 90 and 97).
SHIFTS = POLICY IMPLICATIONS

From
education & training
retraining
on-the-job training
individual training
occupational skilling
functional skilling
narrow skilling
craft mysteries
technical skilling
competence
learning leave
lean organizations
skill demarcations
skill profiles
occupational structures
division of labor
labor markets

To
skill formation
recurrent skill formation
on-the-job learning
group and network learning
career skilling
integrated skilling
broad skilling
shared learning
socio-technical skilling
performance
learning time
skill reserves
skill integration
skill dynamics
career dynamics
balance of skills
skill markets

G.W. Ford. Rethinking Skilling for a Restructured Workplace
Commission for the Future, 1990

NEW DIRECTIONS IN EDUCATION

- Education planning will be done by skill rather than by job;
- Instruction will be provided in modules rather than in courses;
- Courseware development will be automated via expert systems;
- Testing will be embedded and continuous rather than being an explicit event;
- Modules will be multisensory, accommodating various learning styles;
- Networks will provide access to worldwide libraries of instructional modules rather than limiting an employee to local catalogs;
- Education will be truly distributed rather than under the central control of someone other than the learner; and
- Employees can initiate necessary education experiences themselves.

DELIVERY SYSTEMS and FORMATS. Partial technological and tech-intensive delivery systems matured in the 1980s. Four-year degree programs were offered via PC and modem by the New York Institute of Technology in 1984. Since then, many establishments in the private and public sectors have created technology intensive delivery systems.

Communication is critical because it relates to literacy, productivity, and democracy. Communication and information technologies (CIT) are essential in the preserving peace and waging war successfully through air, land, and sea resources integration (see Mike Cupples MARP). Graphic arts and printing (GAP) provide an excellent example of rapid change in CIT in prepress, press, and postpress functions. Ponder the following advances in science and technology.

In 1955, it was hand set type and the platen press.
In 1981, it was the PC.
In 1985, it was desktop publishing.
In 1989, it was voice activated technology and desktop presentations with sophisticated graphics.
In 1993, it was voice activated typewriters and electronic books.
In 1994, it was continuous voice activated desktop multilingual videconferencing which helped to minimize geographic, language, physical and temporal restrictions.
In 1995, it was asynchronous transfer mode (ATM) technology with continuous voice activated software on a PC using cellular-wireless communications technology to access databases through local area and wide area networks for multimedia authoring software to produce learning modules.

Statement: "An explosion of multimedia authoring products has entered the market, ranging from entry-level audio editors to high-level authoring packages. From an education standpoint, the tools available have helped to create a new pedagogy involving multimedia courseware development."
Syllabus, November/December (9)3, p. 48.

Richard Smith developed an excellent proposal. Imagine your increment of growth in content substance and process as you discuss with him electronically via TALK and/or ecr.

Winter Quarter Spring Quarter
Research Question Issues Jan Feb Mar Apr May Jun
1. Organization of Manual
2. Inst systems design models
3. Skills & competencies
4. Plan for evaluation
n. Formative & Summative Comms

How do we assess the external environment, understand trends and apply the "intelligence" to re-engineering HRD systems? What are the major sources of information and how could we reduce the lag between basic research and its application? How do we include economic & technological variables in HRD?
Creating a Future in Content and Delivery System

Advances in research and development (R&D) drive an economy. The U.S. Government funds over 600 R&D laboratories to advance science and technology in agriculture, education, health, military and space, and other fields. Imagine the potential of assessing data from the U.S. Depts of Ag and HHS, including the Centers for Disease Control, and similar units within states to improve quality of life for children.

The private sector invests several times the amount of money in R & D that is invested by the federal government. The U.S. Government is helping the private sector with the competitiveness through several programs including the (a) Advanced Technology Program (ATP) of the National Institute of Standards and Technology (NIST) and (c) National Information Infrastructure (NII) through the National Telecommunications and Information Administration (NTIA).

Technology Transfer (TT) from R&D Centers accelerated in the 1980s and is now focused on NII for economic commerce. Some technologies apply to all establishments such as communication and information technology. The information explosion has gathered force over the past 40 years. Creating "intelligence" via computer and dissemination by communication and information technologies are the classic tools for creating wealth. Perhaps most important for educators and trainers in all contexts, technologies are fundamentally changing the way communications occurs.

Richard elevated our "Learning Community" to a new level. Imagine our increments of growth as you add ideas to his conceptual framework and provide instructional development models. How will you help Phillip Davis elaborate on his conceptual framework for the development of a multimedia course? Imagine our growth from Pearley's interest in electronic publishing that could include McGraw-Hill Online and Primis, the electronic custom publishing system being used by University Council for Educational Administration. What should we learn about the European Assn. of Distance Teaching Universities and "open" universities? Southampton Institute in England began to offer an MBA via the Internet. The University of the Philippines is starting a program that will offer a graduate degree in computer science (Syllabus, September (2) 1, p. 8). How will Virginia Moody, synthesize all this "intelligence" and co-create a next generation graduate program for government and military personnel? How do we "Co-Create Our Next Increments of Growth?"

Winter Spring

Students/Topics Jan Feb Mar Apr May Jun
1. Understanding research & dev
2. Accessing Depts of Ag, Comm, Ed, HHS (CDC)
3. Advanced Tech Program & Adv Tech Ed (ATE) program
4. NIST, including Balrige Nat Quality Award Info
n. NII, Community Learning & Info Network, EADTU
## Conceptual Framework for MARP Project

**Phillip L. Davis - NSU**  
(adapted from R. Smith, 1995)

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Chapter 2 Review of Literature</th>
<th>Chapter 3 Methods and Procedures</th>
<th>Chapter 4 Results</th>
<th>Chapter 5 Discussion &amp; Conclusion</th>
</tr>
</thead>
</table>
| 1. What technologies and instructional methodologies are being used in other institutions to provide online education? | Review literature for model programs that are being used at other colleges. Online search of Internet may provide description and demonstration of state-of-the-art programs. | Step 1. Review literature in adult learning and technology.  
Step 2. Survey exemplary programs at other colleges. | Discuss significant findings from literature.  
Summarize findings of external survey in terms of technology and instructional methodologies found. | Relate specific findings back to review of literature in Chapter 2.  
Organize the significant discoveries into logical units for discussion. |
| 2. What features of user-control in hypermedia and multimedia software supports the needs of the adult learner? | Examine classic hypermedia (Vanar Bush) and multimedia volumes (Nielsen). Examine other research projects for models. | Step 3. Follow up survey with phone interviews. Compile and analyze data.  
Step 4. Perform internal audit of students to assess their technological preparedness for participating in an online course. | List features of user control necessary for supporting the nontraditional student’s learning style.  
Summarize findings of internal survey results using tables and graphs. | List essential features of user-control in the hypermedia/multimedia environment.  
Relate survey findings to this list of features. |
| 3. What advantages do hypermedia and multimedia provide for adult learners in an online course environment? | Delineate the need(s) for self-directed learning in adult (nontraditional) learners. ED models for hypermedia and multimedia programs. | Step 5. Develop a client & server model of the ideal hardware and software for implementing a multimedia online course.  
Circulate model among formative committee and integrate recommendations. | Diagram the client (student) and server (instructor) computer systems in terms of hardware and software.  
Create an idealized model of the client-server relationship for online learning environments. | Summarize major distinctions between the traditional classroom and the “virtual” classroom of the online course format.  
Compare and contrast the two methods of instruction (traditional and online). |

**BEST COPY AVAILABLE**
4. What evaluation methods are appropriate for designing a plan to measure the effectiveness of a multimedia online course?

<table>
<thead>
<tr>
<th>Evidence of online course success (Szabo, Ellsworth, etc.)</th>
<th>Step 6. Develop the hypermedia and multimedia materials. Circulate material among formative committee for comments.</th>
<th>Post hyper/multimedia materials onto a Web server for online access. Prepare demonstration of online course for evaluation.</th>
<th>Present written evaluation plan and describe its development from earlier evaluation plans and models found in literature review.</th>
</tr>
</thead>
</table>

**Primarily content & and content format MARP projects:**
Mike Cupples - educ. & tr. requirements in communication and information tech at the U.S. Army Aviation Center.
Sarah Simpson-Ussery - an inmate-specific curriculum.
Chris Loftin - competencies for child care workers in full service caring and learning environments in Georgia.
Richard Pullen - interpersonal competencies in a Caring Difference Program at Northwest Texas Healthcare System.
Alan Algee - intercultural competencies integrated into formal and informal areas at Faith School of Theology.
Yng-chien Shue - competencies in graphic arts & printing for prepress, press, and postpress at postsecondary level.
Judith Hatula - HRD for attitude change, Telecom Finland.
Chong-Sun Hong - innovative approaches to teach English at Hankuk Aviation U., S. Korea (FAX 011-82-344-911-7711).
Katherine Williams - renewal of the legal secretary certificate program at Moultrie Technical Institute, GA.
James Corbett - exploratory agriculture education at Lowndes Middle School, GA.

**Primarily delivery system and format MARP projects:**
Niann-Chung Tsai - nontraditional degree completion in telecommunications at World College of Journalism & Comm.
John Conklin - distance education - social work education.
Terry Overlock - use of multimedia at Northern Maine T. C.
Kenred Christian - open learning center for the University of Technology, Jamaica (FAX 809-927-1616).
Oscar Vazquez-Melendez - distance learning for Hispanic migrant farmworkers for General Education Development tests.
Greet new advisees Richard Coffee and Edward Lyle.


Terry Overlock's four Practicums are in ERIC.
"Assessment of Faculty Perceptions of Performance Evaluation at Northern Maine Technical College." ED 354 972.
"Development of a Faculty Resource Manual for the Preparation of Course Study Guides at NMTC." ED 367 393.
"A Comparison of Effectiveness of Collaborative Learning Methods and Traditional Methods in Physics Classes at Northern Maine Technical College." ED 367 394.
"Assessment of Employee Perceptions of Current and Future Professional Development Activities at NMTC." ED 373 815.

The American Society for Training and Development and the National Alliance of Business has helped to focus on HRD.
Ms. Dawn Temple, Member Services Division
American Society for Training and Development
1640 King Street, Box 1443
Alexandria, VA 22313-2043
TEL: 703-683-8103
FAX: 703-683-8103

International Conference & Exposition, June 2-6, Orlando

National Alliance of Business
1201 New York Avenue, NW
Washington, DC 20005-3917
TEL: 202-289-2888
FAX: 202-289-1303

The Sept 29 memo mentioned CAUSE and EDUCOM. Conferences:
EDUCOM, Oct 8, Philadelphia, anderson@educom.edu
CAUSE, Dec 3, San Francisco, dsmith@cause.colorado.edu

Ecr Recordings. To access the Dec 3 ecr recording, behind the UNIX prompt, type cd "ecr/GROFFW and then hit "enter" or "return." The UNIX prompt should appear and you then type ecrt -p/MARP1.951119. Previous recordings are:
Sept. 24, cd "ecr/GROFFW, then type ecrt -p/MARP1.950924.
Oct. 8      "          ecrt -p/MARP2.951008.
Nov. 5     "          ecrt -p/MARP1.951105.
Nov. 19    "          ecrt -p/MARP1.951119.
To exit an ecr hit Ctrl c. To exit a classroom, hit Esc x.
If you have technical problems, contact the HELP desk.

BIBLIOGRAPHY. After you have a complete draft of a proposal or a report, check the citations in the body of the paper with the BIBLIOGRAPHY. Read the proposal or report and note that page in the left margin of the BIBLIOGRAPHY. Also, place some type of mark where the reference appears in the narrative. Check the spelling in all locations. Check form and style in all entries in the narrative and BIBLIOGRAPHY. Check alphabetical listing in the BIBLIOGRAPHY.

Our ecr on Dec 17 will touch on a formative evaluation.
AN EXCELLENCE BLUEPRINT

We'll either move ahead to a high wage, high skill, high growth economy or we will be left behind...to compete with the Third World countries that call for little but strong backs and low wages.

Governor Zell Miller. Georgia
America 2000 Leadership Conference
January 13, 1992

Creating & Sustaining Learning Communities in a Digital Era has its origin in conceptual frameworks by visionary people. After the Sputniks were launched in 1957, the U.S. analyzed alternative ways to engage in basic research and use it to improve formal education. High priorities in basic research were identified. Research and development centers (RDCs) were established such as the Center for Cognitive Studies, the Learning Resources Development Center (LRDC), National Center for Research in Vocational Education (NCRVE), and the National Center for Higher Education Management Systems (NCHEMS). Regional Educational Laboratories (RELs) were created to take the basic research and develop, demonstrate, and disseminate new products. Educational Research Information Centers (ERIC) became the archives of knowledge.

Internet began in the U.S. in 1969 by engineers who wanted to collaborate on basic research and reduce the lag between generation of new knowledge and its application. The first international connections were to England & Norway in 1973. The November 1995 issue of Internet WORLD contains articles about Internet in Africa, China, and Europe. In Africa, 30 of 46 countries have access to the Internet.

Gordon Moore, founder of Intel, states
"By the year 2000, you'll be talking to your computer.
And it will probably respond - in 50 languages."
(Lenzer, R. (Sept. 11, 1995. Forbes (156)6, 167-8).

When the world's leading scorer in ice hockey was asked how he scored so much, he stated, "I anticipate where the puck is most likely to be and skate to that area." Professionals who have responsibility for human resources development have a awesome task to anticipate where the puck will be and to develop, implement and evaluate programs to skate to a NET. Skating to the next generation, world class learning systems requires analysis, vision creation & action plan development based on cognitive science and communications technology.
Analysis, Vision, Action Plan (AVA)

Analysis

Strategic thinking includes analysis of the internal and external environments to co-create visions of the future. The assessment of the external environment must include economic and technological variables that are extrapolated into the future to add clarity to fuzzy visions. Visions creation requires NEW HABITS OF HEART AND MIND to break out the mold of contemporary traditional formats. Strategic directions, like "The Global Initiative: A Call to Action," must be interpreted in terms of organizational development (OD) and human resources development (HRD) specifications with Continuous Quality Improvement (CQI) and benchmarks.

Three areas of concentration within HRD could be Career Development (CD), Training & Development (TD), and OD. CD - to assist humans become effective facilitators of the learning process requires tests to diagnose the level of understanding of full-time and part-time employees about curriculum (content, delivery, evaluation) and students. TD - to assist humans acquire competencies and skills to do a job - accountant, admissions, counseling, financial aid, programmer, public relations, safety inspector, etc. OD - to assist humans become more effective and efficient in existing work flow and assist in reengineering work flow. Enrollment Management (EM) consists of creating a strategy to attract more students to an institution or program and to help more humans meet their career and personal needs.

What diagnostic tools are available for CD, TD, and OD? DACUM competency skills are available for career related teachers. Learning style tests help focus on preferences. Cupples completed an analysis of strategic plans at several levels and surveyed employees to determine the communication and information technology needs of a diversified workforce at the U.S. Army Aviation Center, AL (ED 372 185).

All establishments that expect to be viable in the global village will have to "learn to learn" to adopt an agile strategy, the centerpiece of which is strategic thinking and a proactive re-engineering OD capability. Mercer County Community College (MCCC) began with an audit of strategic planning as a prelude to creating its "Plan to Plan" (a practicum for PHE (ED 351 499)). Climate audits of the 1970s yielded to outcomes research by NCHEMS and the NCRVE that led to studies about culture of effective organizations (i.e. see Collegiate Culture and Leadership Strategies, Chaffee and Tierney, American Council on Education, 1988). How would you recommend an ANALYSIS process be co-created and used for variables in your work context?

<table>
<thead>
<tr>
<th>Analysis</th>
<th>Mission</th>
<th>Programs</th>
<th>People</th>
<th>Technology &amp; Know-How</th>
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<td>Vision</td>
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<td>Action</td>
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STRATEGIC THINKING: MAXIMUM SYNERGISM =
LEADERSHIP THROUGH
OD + HRD + TQC

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<th>Pre Program Audit</th>
<th>Year 1</th>
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<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Post Program Audit</th>
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HUMAN RESOURCES DEVELOPMENT

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<th>CAREER DEVELOPMENT</th>
<th>TRAINING &amp; DEVELOPMENT</th>
<th>ORGANIZATIONAL DEVELOPMENT</th>
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<td>ANALYSIS</td>
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<td>VISION</td>
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<td>ACTION PLAN</td>
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<td>188</td>
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</table>
Vision

In 1981, Judith W. Leslie used Toffler's *The Third Wave* to develop an educational institution in an advanced technical era dominated primarily by electronic media. This methodology would allow the learner to proceed at his/her own rate and style, within his/her own time period, at his/her desired location, drawing upon learning materials from throughout the country and the world. Computer science and electronics courses and programs of study would be an integral part of the curriculum. Faculty would be cross-trained in a variety of disciplines and teaching styles. They would have flexible work schedules and loads and might share an assignment with a spouse or colleague. Many faculty would instruct from their home or electronic cottage. . . . (Judith W. Leslie, "As The Third Wave Approaches Higher Education: Planning For the Electronic Institution," CAUSE/EFFECT, January 1981, 4, p. 15). "Restructuring for the 90's...and Beyond" provided detailed data about the North Central region extending from Arizona to Cleveland, Pittsburgh, and West Virginia (ED 343 484). "Restructuring" was about visions and action plan creation. Judith discussed client/server architecture and networked "knowledge nodes" that "knowbots" could access from home. She moved from an "IDEAL" networked society to the "REAL" and then concluded with merging the real with the ideal.

A succession of events occurred in the 1970s and 1980s that included the (a) advent of advanced computer and information technologies; (b) deregulation of the communications, energy, financial services, and transportation industries; and (c) globalization of commerce. During the industrial era, industries performed most of the functions involved in their business within the company for vertical articulation. Managers began to seek ways to reduce costs and improve quality and started to "outsource." Technology made it possible to electronically outsource some types of work to other countries. How will electronic commerce and outsourcing evolve over the next few years? What are the implications for education and strategic alliances for borderless and seamless learning continua, K thru doctorate? Mind Extension University, an eight-year-old for-profit unit, helped create Colorado Electronic Community College. Northern Arizona University is a "communiversity" via NAUNet and could become an electronic globalversity (attachment).

Allegheny County and Pittsburgh, PA, were the heart of the Industrial Era. Pittsburgh is reengineering itself with contemporary technology to be a global communications and transportation hub. Pearley Cunningham and Jim Thrasher are writing proposals to develop strategic plans for colleges in the Pittsburgh area. What visions should they help create? What procedures should they use for visions co-creation?
NAUNet and nauLA

Access Through Information Technology

NAUNet Telecommunications Network

NAUNet is a full duplex interactive microwave network. Multiple sites can interconnect with one another on the network. The first instructional sites in Flagstaff and at the NAU Center in Yuma, Arizona were completed in December 1989, followed by sites in Phoenix (ADoE/Supreme Court), Kingman (Mohave Community College), Tempe (ASU), Tucson (U of A), and Holbrook (Northland Pioneer College). Sites on the Navajo and Hopi Reservations go on-line in 1994 with the second year of support from the U.S. Dept. of Commerce's NTIA. Additional sites are planned for the following years. The system is fully interactive, and NAU plans to include T-1 data and telephony services on many circuits.

nauLA and the Satellite System

The Northern Arizona University Learning Alliance (nauLA) is a voluntary alliance of more than 100 satellite downlink, cable and wireless cable sites across Arizona for the delivery of statewide programs. Supporting nauLA is a C-band satellite transmission (uplink) system. The uplink, completed in 1990, has capability for transmission to areas that cover the contiguous 48 United States. NAU is also a founding member of IDEANET, a nationwide distance education alliance.

Interactive Television Classrooms and Control Rooms

Four interactive classrooms at NAU, two at NAU-Yuma, one at each of the other NAUNet sites, and sites at ASU, UA, and ADoE are fully operational for course delivery, and currently average 50 university credit courses of instruction each semester. Additional classrooms are under construction. The control rooms for each classroom are configured to be "user transparent." Operators using the control rooms may move from one to another with complete ease.

Television Master Control and Production/Postproduction Facilities

The on-campus center of the communications system is the broadcast quality television production studio and postproduction facility, and Master Control for NAUNet-Flagstaff, the campus-wide NAU cable television system, the "feed" to Warner Cable Channel 4 in Flagstaff, and a satellite reception facility that has Ku-Band and C-Band downlink (receive) antennas. The Phoenix hub for NAUNet is located at American Television Relay (MCI).
**Action Plan**

Ideas of next generation "Learning systems" evolved quickly in the 1980s and 1990s. New "world class" models will be based on a deeper understanding of research in the cognitive sciences and communications and information technologies.

Graphic arts and printing (GAP) are an integral part of the communication system. GAP is critical because it relates to effective communication, cultural diversity, multiple intelligences, and the seven ways of learning. GAP is essential because it relates to literacy, productivity, and democracy. The Research & Engineering Council (REC) of the Graphic Arts Industry, located in Chadds Ford, PA, analyzes basic research, patents, and trends in the industry. The Graphic Arts Technical Foundation (GATF) in Pittsburgh, PA, engages in some basic research and provides training for the industry. GATF coordinates the "Printing Skill and Knowledge" occupational standards project. Understanding the "Evolution of the Textbook: From Print to Multimedia" would also be important in co-creating a K-16 electronic online seamless program in GAP (Groff, 1994, ED 352 126).

Dr. Yng-chien Sheu used many procedures to collect data and information to create the strategic plan for a Graphic Arts and Printing (GAP) Technology Department at National Taiwan Normai University. He analyzed numerous GAP programs in the U.S. He sent a survey instrument to 120 corporate executive officers of GAP establishments in the Taipei area. Not only was the plan funded by the Ministry of Education, GAP is a support document to create six Asian-Pacific Centers that will be operational in two to three years. This is a wonderful economic & HRD development opportunity.

Peariey Cunningham will develop a strategic plan to deliver the electronic engineering technology (EET) program at up to the four sites of the Community College of Allegheny County. Could learning modules within EET that relate to desktop publishing be electronically transmitted to some of the five area vocational-technical schools and 42 school districts in the Allegheny County Intermediate Unit? Could GAP learning modules be sent to NAUNet, Yng-chien Sheu, or Young Gi Kim? What type of strategic alliance between CCAC and others could be created to promote economic and HRD development? What strategic alliances should be considered with Commonwealth Campuses of Penn State University, State System of Higher Education, and private college in the region?

Jim Thrasher will develop a strategic plan for the Career Services Office that includes areas of career development, career planning, and the job search for students in the liberal arts, sciences, business, and engineering; education majors are served through their department. What career services should students receive – IDEAL? How would you co-develop a multi-year action plan to meet those needs?
"Co-Creating Our Next Increments of Growth"

Our model for identifying WHAT to focus on is as follows:

Winter  Spring

Student Res Questions/Issues  Jan  Feb  Mar  Apr  May  Jun

1.  
2.  
3.  
4.  
n.

Kenred Christian Research Question/Issues
1. What is open learning?
2. Principles for open learning at U. of Tech. Jamaica?
3. Criteria and requirements for open learning at UT?
4. Plan for pilot distance ed program at UT?
5. How to evaluation effectiveness of open learning at UT?

Shirley Waterhouse Research Question/Issues
1. Hardware/software for faculty ed tech resource services
2. Tech training for faculty to improve ed use
3. Personnel needs to operate ed tech resource services
4. Goals for ed tech resource services and budget
5. Appropriate evaluation plan for ed tech resource service

Oscar Vazquez-Melendez Research Question/Issues
1. Distant learning for Hispanic migrant farmworkers
2. Elements for student preparation
3. Educational technology for delivering course work
4. Processes for implementation
5. Curriculum evaluation

Richard Smith Research Question/Issues
1. Organization of Manual
2. Inst systems design models
3. Skills & competencies
4. Plan for evaluation
5. Formative & Summative Comms

Phillip Davis Research Question/Issues
1. Technologies & methodologies for online instruction
2. User-control hypermedia and multimedia software
3. Hypermedia and multimedia for adult learners
4. Evaluation of effectiveness of multimedia online courses

Althea Stevens Research Question/Issues
1. Procedures for distance learning program in computer sci
2. Delivery system for distance learning program in CS?
3. Technologies for distance learning using multimedia?
4. How to evaluate student learning outcomes?

Robert Freeman Research Question/Issues
1. Strategic planning for cont. ed. at Fuller Theological S
2. How can SP be applied to continuing and extended ed?
3. How can SP be evaluated to ensure an effective process?
**Pearley Cunningham Research Question/Issues**
1. How can newer electronic communications tech be used to provide a virtual learning community across the college?
2. What is appropriate SP - program levels & institutions?
3. Knowledge & skill levels expected by industry?

**Kay Delk Research Question/Issues**
1. Hardware & software to convert computer courses to DL?
2. HRD - inst design, curr. communications, technologies?
3. Personnel - procedures to convert to distance learning?
4. Goals - objectives, funding, & evaluation plan?

**Karen Hoblit Research Question/Issues**
1. SP to integrate instructional tech into teaching at VC?
2. OD needed to integrate inst tech into teaching?
3. HRD needed to integrate inst tech into teaching?
4. Impact on the learning environment & evaluation format?

**Shirley Gantt Research Question/Issues**
1. SP for integrated information system for instruction?
2. How can technology be used to enhance learning?
3. Design for implementation with OD, HRD, and evaluation?

**Virginia Moody Research Question/Issues**
1. Research about non-traditional doctoral programs?
2. Doctoral programs needed at Brooks Air Force Base?
3. SP for a doctoral program for government and military?

**What topics should I address?**
1. Understanding basic research & development
2. Accessing Depts of Ag. Comm. Ed, HHS (CDC)
3. Advanced Technology Program (ATP). Nat Science Fdn.

Since 1990, the ATP has worked to advance the nation's competitiveness by funding powerful, new technologies that underlie a broad spectrum of applications, commercial products, and services. Some of the ATP projects are:


Focused program competitions have been:
- Digital Data Storage (95-03),
- Digital Video in Information Networks (95-04),
- Materials Processing for Heavy Manufacturing (95-07),
- Component-Based Software (95-09),
- Information Infrastructure for Healthcare (95-10), and Manufacturing Composite Structures (95-11).
Broad Social Issues
An ultimate purpose is to become Third Wave Transformational Leaders, the intellectual capital to assess changes that are occurring and apply the best in basic research to solutions to provide a better quality of life in the global village. To achieve that ultimate purpose, we can create and sustain formal and informal learning communities to meet our needs. A community of believers in a church meets spiritual needs. A community of learners in a doctoral program can create and sustain both formal and informal electronic networks that are far more effective and efficient than traditional means. While using technology to accomplish the formal requirements for degree completion, one gains greater insight about broad social issues that result from advances in science and technology which must be addressed in policy. How do we address these issues on the way to the millennium?

Winter

Spring

Broad Social Issues
Access to Internet
Commerce - electronic mandate
Copyright
Discs for Kids
Ergonomic Regulations
Gambling, casinos online
Gaming - attack to kill to gain points mindset in youth
Outsourcing software development to developing countries
Pornography on the Internet
Property rights
Technolust
Technophobia
Techno Terrorism & Workplace Techno Violence

SLC Formative Evaluation Questions
1. What was of greatest value to you and why?
2. What was of least value? Can it be changed and saved?
3. Would you change something? In what way? Why?
4. Comment on the way I handled the electronic classrooms? Please take a few minutes and send me you comments. Use the above mentioned questions or some way of providing feedback. Also, please provide suggestions for future activities.

* * * * * * * * * * * *

VISION & ACTION PLAN

Vision without action is merely a dream.
Action without vision just passes the time.
Vision with action can change the world.

Joel Barker

* * * * * * * * * * * *

SEASON'S GREETINGS
APPENDIX D

Materials Developed by Alan Algee

VISION & ACTION PLAN

Vision without action is merely a dream.
Action without vision just passes the time.
Vision with action can change the world.

Joel Barker

Alan Algee took on a very difficult project. How could Faith Theological Seminary prepare evangelical missionaries for cultures foreign to their own. Analysis of a very soft literature was a difficult task. Consensus on a strategy to take that body of "intelligence" and fit it into a curriculum was an even more complex task. Assessing and evaluating changes in attitudes and behavior as the result of the intervention became even more complex.

The project made a difference in many ways. One of the most significant contributions is insights into how schools of theology can better prepare their human resources. Most missionaries are through preservice and "in the field." Many work in isolation. A major challenge is to provide for their continuing professional development. Can this base of knowledge be replicated and improved upon in a distance education online delivery format? Dr. Algee is now at the Siberian Theological Institute in Irkutsk, Siberia, and online (73664.3513@compuserve.com).

The U.S., and most of its institutions, is in its infancy in making the transition from merely tolerating cultural diversity to some higher level of acceptance. Most institutions could undertake a cultural sensitivity project to move from tolerating differences to celebrating unique characteristics. Most of the project management and report writing aids and techniques are in this appendix.

As he thinketh in his heart so is he.

Proverbs 23:7
THE DEVELOPMENT, IMPLEMENTATION, AND EVALUATION OF A
MODEL FOR TEACHING INTERCULTURAL COMPETENCY
THROUGH THE CONTENT AREAS AT
FAITH SCHOOL OF THEOLOGY

Alan Algee

A major applied research project presented to Programs
for Higher Education in partial fulfillment
of the requirements for the degree of
Doctor of Education

Nova Southeastern University
June 1995
## Conceptual Framework

<table>
<thead>
<tr>
<th>Research Question</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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<tbody>
<tr>
<td>Chapter</td>
<td></td>
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## CHAPTER 5

<table>
<thead>
<tr>
<th>DISCUSSION</th>
<th>CONCLUSIONS</th>
<th>IMPLICATIONS</th>
<th>RECOMMENDATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Question 1</td>
<td></td>
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<tr>
<td>Research Question 2</td>
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<td></td>
<td></td>
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<tr>
<td>Research Question 3</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

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Algee’s Self-Directed Guide for Forging Chapter 2

I. Criteria for CONTENT

Discuss the development process
Discuss concepts & issues surrounding my design
Present findings from similar studies
Show sound criteria for a good product
First paragraph is an overview
Last paragraph recapitulates & links
Insights into problem

Gibney
Gibney
Gibney
Gibney
Robinson & Lorion
Robinson & Lorion
Merriam

II. Criteria for INCLUSIONS

Accuracy
Adds to conceptual base
Date is 1988+ or explained
Does NOT defend thesis, rather provides historical base

Gibney
Robinson & Lorion
Robinson & Lorion
Jones, CC; Merriam

III. Criteria for FORMAT & PRESENTATION

Orderly presentation of ideas
Smoothness of Expression
Economy of Expression
Precision & clarity in word choice
Inverted pyramid
Thematic Outline
Historic present tense throughout
Convinces that the study is needed & significant

APA
APA
APA
APA
Convention
Merriam
Robinson & Lorion
Merriam
IV. Criteria for OVERALL Presentation

Thinking from other experts included

Thorough listing of existing research

Looks like a mini library

A clear basis for discussion in Chap 5

A braided comparison/contrast, not a rote list

An adequate number of entries [??]

FINAL CHECK LIST:

[ ] Citation in text agrees with reference list (accuracy)

[ ] Re-examine each article to assure accurate interpretation

[ ] Have Cluster Coordinator evaluate

[ ] Have the Associate Cluster Coordinator evaluate

NOTES:

I touched all of the material in the Bibliography. Most are cited either in Chapter 2 or elsewhere in the study.

REFERENCES FOR LITERATURE REVIEW


CONVOLUTIONS & INTERCONNECTIONS OF PROCEDURES

[Evidence by citations from chapter 3]

<table>
<thead>
<tr>
<th>Page/line #</th>
<th>The Literature</th>
<th>The External Input</th>
<th>The Internal Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-13</td>
<td>These included: (a) a review of the literature</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-1</td>
<td>The procedural steps followed the Context-Input-Process-Product (CIPP) approach recommended by Novak (that presses literature sources into the system)</td>
<td></td>
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</tr>
<tr>
<td>2-3</td>
<td>Grounded theory allows for some outcome (e.g., a theory or a model) that is derived from many disparate pieces of collected evidence (from the literature) that have some interconnection. (These two columns are filled in and on file with a list)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3-21</td>
<td>A thorough review of the literature was undertaken to build a list of such models. The search included models found in. Additionally, this step uncovered (a) the wide variety of theoretical understandings of ICC, (b) the possible strengths and weaknesses of existing models, (c) the criteria that might be used to describe an effective ICC infusion model, and (d) a list of potential components and features…</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4-11</td>
<td>Each item was processed by applying a complex outline along with other tools such as computer sorting, note cards, tables, and color-coded files</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

all : Step 2: Analysis and Classification of Extant Models

6-14        | A comparison was made of the new scheme with a prominent one in the literature |                   |                   |

7-20        | All prospects had earned doctorates and, except for one, had recent publications on topics related to intercultural issues |                   |                   |

8-21        | From the literature review and the analysis of existing models, a list of 10 general and open-ended discussion questions was drafted |                   |                   |

11-8        | Therefore, the purpose and propriety of using Delphi procedures was reviewed |                   |                   |

11-11       | A list of common ICC objectives (extrapolated from across the literature) was summarized into a rating form and presented in the group... With the rating form, evidence was gathered for use

### Conceptual Framework (Chapters 3 & 4)

<table>
<thead>
<tr>
<th>Research Questions</th>
<th>Chapter 3: Procedures</th>
<th>Chapter 4: Results</th>
<th>Key Points to Prompt Clinical Narration</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 What models now exist which lead to ICC for different groups and settings?</td>
<td><strong>STEP 1</strong> Find all credible ICC models now in use. Review theories from psychology, sociology, anthropology, education, theology, and model theory, identify contributions which may be important in developing an ICC model</td>
<td>Thirty-six ICC models serving business, industry, government and service were found. The objectives can be (and often are) organized into four domains (list).</td>
<td>What is being attempted by so-called ICC? Which sciences contribute to ICC and what contributions do they make? What current ICC curricular infusion models exist for application at seminaries? Why not use??? How were the 29 impact statements used? What criteria should be used to construct a good model for FST?</td>
</tr>
<tr>
<td>2 What were the foundational assumptions behind these models and how were they validated?</td>
<td><strong>STEP 2</strong> Analyze and classify extant models</td>
<td>The 36 models were analyzed by displaying a table showing author, date, focus, application, components, validation, assumptions, and classification</td>
<td>How may existing models be studied? Cite Appendix # [discussion of Step 2 is combined with the next research questions]</td>
</tr>
<tr>
<td>3 Does the repertoire of existing models have some taxonomic order and, if so, which level best fits FST?</td>
<td><strong>STEP 1</strong> Find all credible ICC models now in use. Review theories from psychology, sociology, anthropology, education, theology, and model theory, identify contributions which may be important in developing an ICC model</td>
<td>Most models utilize unique assumptions. These were listed in the table noted above. There were no clear commonalities among the assumptions used in various sectors of society when ICC is being fostered. A variety of non-empirical validity techniques were used, some models were unvalidated Establishing empirically based validity does not seem to be of great concern when invoking ICC models in actual settings</td>
<td>What assumptions were found? Why were such assumptions used? What are some of the untested questions which would be important in developing a model? Who is typically served by ICC models? How are ICC models validated? Cite Appendix # [discussion of Step 2 is combined with the next research question]</td>
</tr>
</tbody>
</table>

**Notes:** 1. **[Explain the table]** (Explain the table) 2. **[Explain the table]** (Explain the table) 3. **[Explain the table]** (Explain the table)
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</thead>
<tbody>
<tr>
<td><strong>STEP 1</strong></td>
<td></td>
<td>Yes to question #4 as the pool of candidates agreed that while innovative, an infusion model sounded feasible and should be seriously explored.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Yes to question #4 as a credible seven-member panel agreed to provide valuable input for both development and validation.</td>
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<tr>
<td></td>
<td></td>
<td>Yes to question #4 as an instrument that would lead to ICC, using existing content areas, be designed, implemented, and evaluated?</td>
<td></td>
</tr>
<tr>
<td><strong>STEP 4</strong></td>
<td></td>
<td>Yes to question #4 as faculty vocalized commitment to implement ICC in courses.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Yes to question #4 as a questionnaire indicated that participants believed that most of the 43 typical ICC objectives should be systematically infused into their courses.</td>
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<td>Yes to question #4 as the pool of candidates agreed that while innovative, an infusion model sounded feasible and should be seriously explored.</td>
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<tr>
<td><strong>STEP 5</strong></td>
<td></td>
<td>Yes to question #4 as faculty vocalized commitment to implement ICC in courses.</td>
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<td></td>
<td></td>
<td>Yes to question #4 as faculty vocalized commitment to implement ICC in courses.</td>
<td></td>
</tr>
<tr>
<td><strong>STEP 6</strong></td>
<td>Formation of a curriculum infusion model</td>
<td>Yes to question #4, a 7-step model was drafted: 1) vision among administration, 2) vision among faculty, 3) annual workshop, 4) pre-assessment, 5) refine ICC objectives, 6) infusion, 7) evaluation. Each process yielded distinct products.</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Yes to question #4, 42 ICC objectives were written into the curriculum. Of these, 27 occurred by Fall 1994.</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>After 1 semester, 100% of faculty indicated cooperation &amp; commitment to the infusion process.</td>
<td></td>
</tr>
</tbody>
</table>

**Research Questions Continued:** Could a valuable model leading to ICC, using existing content areas, be designed, implemented, and evaluated?

**STEP 7** Identifying objectives for use with the model

**STEP 8** Critical review of the model (review by a panel of experts)

**STEP 9** Revision and 2nd review

**STEP 10** Implementation & workshop

**STEP 11** Quantitative evaluation using 4 scales using the CCAI and several null hypotheses

---

**Chapter 4: Results**

**Key Points to Prompt Clinical Narration**

- Present a brief summary of the difference between the two panels in terms of ICC objectives that should be included at FSTP
- Present the model which is to appear as an appendix per NSU guidelines.
- Cite Appendix in which the model is actually displayed.
- Present a "word table" per APA 3 65
- Briefly describe the revised model
- Case study in which the model is actually displayed
- Present a "word table" displaying implementation processes and outcomes
- Present a "word table" displaying implementation processes and outcomes
- Present the difference of these ICC objectives merged into the curriculum
- Present a "word table" displaying implementation processes and outcomes
- Present the overall results of the CCAI
- Present the overall results of the CCAI
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<tbody>
<tr>
<td></td>
<td></td>
<td>1 Changes suggested by experts</td>
<td>2 Reasons for Revisions</td>
</tr>
<tr>
<td>Gudykunst Compared to Salge</td>
<td>Table 1</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>FST Questionnaire</td>
<td>Table 2</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Panel Ratings of ICC objects</td>
<td>Table 4</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Recommendations &amp; Reply for Revising (I)</td>
<td>Table 5</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Recommendations &amp; Reply for Revising (II)</td>
<td>Table 6</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Implementation Measures/Outcomes</td>
<td>Table 7</td>
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<td>X</td>
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<tr>
<td>CCAI Pretest &amp; Posttest Scores</td>
<td>Table 8</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Comparison of FST with Standard CCAI</td>
<td>Table 9</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Evaluation of Workshop</td>
<td>Apndx #</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Working Grid for ICC Objectives at FST</td>
<td>Apndx #</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Detailed Input from Related Disciplines</td>
<td>Apndx #</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>The Table of 36 ICC Models</td>
<td>Apndx #</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Criteria for proposed model</td>
<td>Apndx #</td>
<td>X</td>
<td></td>
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<tr>
<td>Signature Sheet for External Experts</td>
<td>Apndx #</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Correspondence With External Committee</td>
<td>Apndx #</td>
<td>X</td>
<td></td>
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</table>

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<td></td>
<td>1 Changes suggested by experts</td>
<td>2 Reasons for Revisions</td>
</tr>
<tr>
<td>First Draft of Model</td>
<td>Apndx #</td>
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<tr>
<td>Detailed Explanation of the Model</td>
<td>Apndx #</td>
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<tr>
<td>Final Draft of the ICC Infusion Model</td>
<td>Apndx #</td>
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<tr>
<td>Selected Workshop Materials</td>
<td>Apndx #</td>
<td>X</td>
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<tr>
<td>Evaluation Instrument Measuring ICC</td>
<td>Apndx #</td>
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</tbody>
</table>

LOGICAL STRINGS FOR A SOUND MARP
Built upon Two Model MARPS
Simpson (1993); Pullen (1995)

CHAPTER 1

- Research indicates a broad gap...
- Traditionally, from two perspectives... often difficult...
- According to [sources]...
- X is often known to affect Y
- Learning to do X would mean Y at Z institution
- It is imperative that...
- Similar institutions are...

- Perceptions are currently...
- Therefore X would seem necessary if Y is to be anticipated
- It is not realistic to expect...
- X is not currently being fostered with success [possible reasons...]
- X continues to be a major problem at Z institution
- Related technologies...
- The present emphasis is on Y

CHAPTER 2

- The literature search was organized around [issues, concern]
- According to; Doe supports Smith;
- Doe suggests; emphasizes;... states...; discusses... distinguishes...
- Describes...; assesses X; focused upon...
- X is thus...; additionally...; further...
- Moreover...

- X may be viewed in terms...
- The components of...; # institutions with similar programs...
- Although X is necessary, it is Y which...
- The characteristics of...; the process consists of...; the methods of X are...; the related issues are;
- A vital link between X and Y is/should/will be established
- Apparently, when X occurs Y is a common result

CHAPTER 3

- X methodology was used to create Y
- X was submitted/
- The initial X came from...
- Members of the committee are...; the challenge to the committee was...

- The [officer] appointed;... the [title] reported...
- Info was obtained from...
- Meetings were conducted... for the purpose of...;
- X was developed in concert with Y;
- [Title] was responsible for...
- Summative evaluation was conducted by...
- The [program] was presented to [title] on...;
- # of areas were specifically measured by...

CHAPTER 4

- Was utilized
- The committee / director / subjects / team / staff / respondents...
- Recommended / decided / selected / discussed / agreed / met on / prioritized / compiled / determined / requested / brainstormed / found / assisted / asked
- Reviewed / cited / contributed /
- [Simple & linear descriptors of product / video / model / program / curriculum no sales pitch!!]
- The final product...
- Since... due to...
- It was necessary for...
- The [procedure] disclosed...
- Of X participants, Y felt...
- As reported in table X...
- Further / additionally / moreover
- X had Y, while W had Z
- X was assigned to Y
- Key concepts were addressed
identified

• as a result of

• was substantiated by

• from X. Y was established

• factors that appear to cause X are

• the [statistic] showed

• the data indicate that

• X was compiled from Y

• changes in Y occurred

• concern over X was expressed

• On mm/dd/yy, 

• # uses were incorporated into Y

CHAPTER 5

Discussion

• The [professionals] are becoming aware of 

• The [professionals] must restructure so that 

• The [resulted] provided X so that Y decisions could be based on Z

• X supported Y; once this was accomplished, X could be developed

• Similarities among related institutions.

• From the literature, X was derived.

• While the literature led to X, the implementation resulted in Y

• The results varied [internally and externally] but were similar to 

• Once the program is fully implemented, it is anticipated that 

• The [procedure] identified . . . this compares to Doe who found 

• When compared to . . .

• While X was anticipated, Y was found because of Z reasons

Conclusions

• # research questions were answered as X was developed

• it is concluded that . . .

• These conclusions are based upon . . .

• Clearly, X led to [validity]

• [summarize program]

• It can be concluded that . . . may . . .

• Additionally, [uniqueness]

• X may be a continuous process

• It is imperative that . . . ; X approach is likely to led to Y success in the future

• The program continues to . . .

• Currently . . .

• It was determined that . . .

Implications

• X can affect the overall future of Y

• X may assist in Y . . .

• The mechanisms that lead to such anticipation are available . .

• If existing trends continue and X is implemented, then Y will fit X in Z situations

• It is necessary for [institution] to maintain X and change Y

• It the [problem] goes untreated, then Y is likely

• The major key to [the problem] is X [solution]

• X can have an effect on Y

• Nationwide . . .

• As X increases, Y will continue to . . .

• Attempts must be made to . . ; Using such approaches can lead to . . .
Synthesis and First Draft
Identify Objectives
Validate First Draft
Revise and Final Validation
Implement Model
Evaluation
Assumptions
Limitations

Chapter 4
RESULTS

Insights from Multiple Disciplines
Results from Extant Models
Results of External Committee Search
Results of External Input
Results of Internal Input
Results from First Draft
Results From the Search for Objectives
Results From First Validation of Model
Results of Revision and Final Validation
Results of Model Implementation
Results from Evaluation

Chapter 5
DISCUSSION, CONCLUSIONS, IMPLICATIONS...

Discussion
Gather Insights from Multiple Disciplines
Analyze Extant Models
Establish External Committee
Solicit External Input
Solicit Internal Input
Synthesis and First Draft
Identify Objectives
Validate First Draft
Revise and Final Validation
Implement Model
Quantitative Evaluation
Conclusions
Implications
Recommendations
Chapter 1
INTRODUCTION
Nature of the Problem
Intercultural Competency
Faith School of Theology

Mission and Purpose
Governance
  Foundational documents
  Organization
Program Overview
  Outcomes
  Majors
  Three-year program
  Fourth-year option
  Extra-curricular components
  Endorsements
Resources & Facilities
Students
Intercultural Competency at FST

Background and Significance
  Purpose of Project
  Research Questions
  Definitions of Terms

Chapter 2
REVIEW OF LITERATURE
Overview
  The Theoretical Basis for Intercultural Competency as an Operational
  Theoretical Explanations Underlying Intercultural Competency
  Intercultural Competency as an Operational Construct
  Competency in Terms of Adaptability
  Competency in Terms of Communication
  Competency in Terms of Predicative Traits
The Apparent Need for Developing Intercultural Competency
Models for Developing Intercultural Competency
  Criteria Behind Effective Models
  Components
  Implementation Strategies
  Models Used in Seminaries
The Infusion Approach
Summary

Chapter 3
METHODOLOGY AND PROCEDURES
Procedural Overview
Step 1: Literature Review
Step 2: Analysis and Classification of Extant Models
Step 3: Formation of External Panel
Step 4: Solicitation of External Input
Step 5: Solicitation of Internal Input
Step 6: Synthesis of Input and Drafting Model
Step 7: Identification of Objectives for Implementation
Step 8: Critical Review of the Initial Model
Step 9: Revision and Second Review
Step 10: Implement Model
Step 11: Evaluation of Model

Assumptions
Limitations

Chapter 4
RESULTS

Question 1: Existing Models
Results From Step 1: The Literature Review

General Findings
Models in Present Use
Criteria for ICC Model Construction
Contributions from Related Disciplines

Question 2: Foundational Assumptions
Results From Step 2: Analysis and Classification of Extant Models

Question 3: Taxonomic Order of Existing Models
Results From Step 2 (cont’): Analysis and Classification of Extant Models

Classification Scheme
Horizontal axis.
Vertical axis.
The quadrants.
Comparison With Gudykunst and Hammer (1981)
Application of New Scheme to FST

Question 4: ICC Model Development and Implementation
Results From Step 3: External Committee Search
Results From Step 4: Solicitation of External Input
Results From Step 5: Solicitation of Internal Input

Delphi Procedure
Results of Questionnaire

Results From Step 6: Formation of a Curriculum Infusion Model
Results From Step 7: Identification Appropriate ICC Objectives
Results From Step 8: Critical Review of the Initial Model
Results From Step 9: Revision and Final Review
Results From Step 10: Model Implementation

Outcomes of Implementation

Workshop and Distribution of Objectives

Question 5: Quantitative Evaluation of Model

Results From Step 11: Quantitative Evaluation

Chapter 5

DISCUSSION, CONCLUSIONS, IMPLICATIONS . . .

Discussion

Discussion of Step 1: The Literature Review

ICC Theories and Strategies

Insights From Multiple Disciplines

Discussion of Step 2: Analysis and Classification of Extant Models

Discussion of Step 3 and Step 4: Input From External Committee

Discussion of Step 5: Internal Input

Discussion of Step 6: Formation of ICC Model

Components

Support and Validation

Characteristics

Discussion of Step 7: Selection of ICC Objectives

Discussion of Step 8 and Step 9: Final Review and Revision

Discussion of Step 10: Implementation of the Model

Discussion of Step 11: Evaluation of the Model

Conclusions

Implications

Steps Preceding Model Construction

Model Construction, Implementation, and Evaluation

Recommendations

Recommendations for Implementation

Recommendations for Dissemination

Recommendations for Further Research
**Conceptual Framework (Chapters 1, 3, 4)**

<table>
<thead>
<tr>
<th>Chapter 1</th>
<th>Research Questions</th>
<th>Chapter 3 Procedural Steps (these drive the outline of chap 3 &amp; 4)</th>
<th>Chapter 4 Results</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Background/Problem</strong></td>
<td><strong>From Proposal</strong></td>
<td><strong>Based Upon Proposal</strong></td>
<td><strong>Report</strong></td>
</tr>
<tr>
<td>Faith School of Theology lacked a method for developing intercultural competency in graduates who are expected to minister to a diverse world. The administration and curriculum committee doubted that the curriculum could be feasibly expanded. Studies indicated that simply adding more courses (the “quick fix”) does not always lead to intercultural competency. A solution was attempted by the infusion of intercultural competency training into existing content areas over the four-year seminary career. This study revolved around development, implementation, and evaluation of a model for accomplishing this infusion and, thereby, facilitating the intercultural competency of the student.</td>
<td><strong>STEP 1</strong></td>
<td><strong>Research Questions</strong></td>
<td><strong>Chapter 4 Results</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Chapter 3 Procedural Steps</strong></td>
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<td></td>
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<td><strong>Chapter 1 Result.</strong></td>
<td><strong>Chapter 3 Procedural Steps</strong></td>
<td><strong>Chapter 4 Results</strong></td>
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<td><strong>STEP 1</strong></td>
<td><strong>Research Questions</strong></td>
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<td>feasibility expanded. Studies indicated that simply adding more courses (the “quick fix”) does not always lead to intercultural competency. A solution was attempted by the infusion of intercultural competency training into existing content areas over the</td>
<td></td>
<td><strong>Review theories &amp; insights from psychology, sociology, anthropology, education, theology, &amp; model theory, identify components which may be important in developing an ICC model!</strong></td>
<td><strong>This inquiry resulted in a reduction of 34 insights from which 19 potential impact statements and 12 model criteria were derived. These results formed the backdrop of the framework.</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>STEP 2</strong></td>
<td><strong>Review theories &amp; insights from psychology, sociology, anthropology, education, theology, &amp; model theory, identify components which may be important in developing an ICC model!</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(building on the effort to answer this question was combined with step 2: in that step, assumptions and validity was tested for each model)</td>
<td><strong>Thirty-six ICC models serving business, industry, government, and service were analyzed by displaying in a table showing author, date, focus, application, components, validation, assumptions, and classification.</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>[the effort to answer this question was combined with step 2: in that step, an order was identified]</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>[the effort to answer this question was combined with step 2: in that step, an order was identified]</strong></td>
<td><strong>Yes to question 1 #4 as the pool of candidates agreed that while innovative, an infusion model sound feasible and should be seriously explored.</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>[the effort to answer this question was combined with step 2: in that step, an order was identified]</strong></td>
<td><strong>Yes to question #4 insofar as thirty-seven impact statements were reduced from the interviews. All consultants agreed these statements.</strong></td>
</tr>
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<td></td>
<td></td>
<td><strong>[the effort to answer this question was combined with step 2: in that step, an order was identified]</strong></td>
<td><strong>Yes to question #4 insofar as the interviews revealed 7 important themes that needed to be considered throughout the development.</strong></td>
</tr>
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<td><strong>[the effort to answer this question was combined with step 2: in that step, an order was identified]</strong></td>
<td><strong>Yes to question #4 insofar as the interviews confirmed findings from the literature review that ICC should be broken down into knowledge, attitudes, and skills.</strong></td>
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<td><strong>[the effort to answer this question was combined with step 2: in that step, an order was identified]</strong></td>
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### Conceptual Framework (Chapters 5)

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<tr>
<th><strong>Research Questions</strong></th>
<th><strong>Chapter 5 Discussion</strong></th>
<th><strong>Chapter 5 Conclusions</strong></th>
<th><strong>Chapter 5 Implications</strong></th>
<th><strong>Chapter 5 Recommendations</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What models now exist which lead to ICC for different groups and settings?</td>
<td>- The social sciences contribute vital criteria which can be utilized when developing an ICC infusion model.</td>
<td>- Models vary widely across business, industry, service, &amp; government sectors— even though they are attempting to treat the same problem, some are prescriptive and others are general; all models focus on 1 or 4 domains.</td>
<td>- ICC is a relatively new construct and not well developed.</td>
<td>- At the stage of ICC's development as a social field, it may be helpful for institutions to consider a model for developing an ICC model. This was essentially achieved in this study with the procedural steps.</td>
</tr>
<tr>
<td>2. What were the foundational assumptions behind these models and how were they validated?</td>
<td>- Assumptions are as varied as the models themselves. Assumptions do not seem to coagulate into any simple paradigm.</td>
<td>- If a model focuses on any of the four domains, there is no clear theory base for any model.</td>
<td>- If a model focuses on any of the four domains, there is no clear theory base for any model.</td>
<td>- FST may need to test out its own assumptions &amp; philosophy toward ICC rather than look for a standardized menu of assumptions.</td>
</tr>
<tr>
<td><strong>Note:</strong> The procedural steps as outlined in Chapters 3 &amp; 4.</td>
<td>- The majority of the steps are in place in Chapter 3 of the manuscript.</td>
<td>- Most validation is achieved through some sense of success established over time by the users of the model.</td>
<td>- ICC models may not be easily transported from one milieu to another.</td>
<td>- It may be difficult to validate ICC by conventional validation techniques. Case-study &amp; focus sessions may help keep ICC processes in tune with field needs.</td>
</tr>
</tbody>
</table>

**STEP 2 footnote:** This step helps answer questions 1, 2, & 3. Therefore, this step will be outlined in chapter 4 in terms of those questions.
1. Does the repertoire of existing models have some taxonomic order and, if so, which level best fits FST?

- Arranging ICC models into a logical order, like all scientific classification, is arbitrary. Such order can be most easily based on complexity.
- The scheme used does not reveal the integrity of various models.
- Four prominent scales can be applied: developmental vs practical and broad focus vs narrow focus. The 4-quadrants provide a way to organize current models.

2. Could a valuable model leading to ICC, using existing content areas, be designed, implemented, and evaluated?

- An ICC infusion model can be implemented if the model is unique to a particular setting.
- Infusing ICC across a seminary curriculum is a very complex undertaking which requires external & internal input, time, money, coalition building, objective inquiry, a long-term commitment.
- Leadership is crucial (visioning, planning, acting, communicating).
- ICC cannot be achieved by a model alone; actual objectives are needed; the model is way to process those objectives so that they can be infused into the system.
- It is crucial that participants understand the model and are willing, if not enthusiastic, to see its implementation. (The model must be owned by these participants rather than imposed)
- Tangible means of providing the infusion must be arranged. A multi-session workshop for faculty and administration, using an external educational consultant, appears to be sufficient to accomplish the infusion.
- The expertise of an external consultant is a tool that can be used to expedite the infusion

3. Can a curriculum infusion model lead to ICC among students and faculty?

- The CCAI is a useful tool in evaluating ICC growth among seminary students.
- [these conclusions will be established based on students' and faculty's 'pre & post tests measuring emotional resilience, flexibility/openness, perceptual acuity, and personal autonomy.]
- ICC is/is not reachable through the present curriculum when ICC objective are facilitated with an infusion model.

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<td>1. Does the repertoire of existing models have some taxonomic order and, if so, which level best fits FST?</td>
<td>- Arranging ICC models into a logical order, like all scientific classification, is arbitrary. Such order can be most easily based on complexity.</td>
<td>- The scheme used does not reveal the integrity of various models.</td>
<td>- Institutions can narrow their search for an ICC model by referring to the scheme displaying 4 basic quadrants.</td>
<td></td>
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<tr>
<td>2. Could a valuable model leading to ICC, using existing content areas, be designed, implemented, and evaluated?</td>
<td>- Four prominent scales can be applied: developmental vs practical and broad focus vs narrow focus. The 4-quadrants provide a way to organize current models.</td>
<td>- Sophisticated action-plans are needed if the infusion is to be realized.</td>
<td></td>
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<td>3. Can a curriculum infusion model lead to ICC among students and faculty?</td>
<td>- An ICC infusion model can be implemented if the model is unique to a particular setting.</td>
<td>- Infusing ICC across a seminary curriculum is a very complex undertaking which requires external &amp; internal input, time, money, coalition building, objective inquiry, a long-term commitment.</td>
<td>- ICC may be reachable when a seminary provides for the 7-step model (vision among administration, vision among faculty, annual workshop, pre-assessment, refinement of ICC objectives, infusion, evaluation). ICC may not be reachable through a seminary curriculum.</td>
<td></td>
</tr>
</tbody>
</table>

**BEST COPY AVAILABLE**
OUTLINE OF CHAPTER 5

Chap ID Chapter 5
Level 1 DISCUSSION, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

Level 2 Discussion

[Key discussion to each of the 11 procedural steps, as Sarah Simpson did. Tie my results with the literature of chapter 2]

Level 3 Gather Insights from Multiple Disciplines
Level 3 Analyze Extant Models
Level 3 Establish External Committee
Level 3 Solicit External Input
Level 3 Solicit Internal Input
Level 3 Synthesis and First Draft
Level 3 Identify Objectives
Level 3 Validate First Draft
Level 3 Revise and Final Validation
Level 3 Implement Model
Level 3 Quantitative Evaluation

Level 2 Conclusions

Sum up (with no further outlining); this should contain language of analysis and synthesis. This should be organized around the research questions.

Level 2 Implications

Discuss the consequences which arise from the conclusions; do not break down into further outlining. Here apply the SO WHAT!? test.

Level 2 Recommendations

Present 3-fold outline: 1) actions that FST should take now; 2) further research; 3) dissemination
26 September 1994

Dr. Warren Groff
1531 Peabody Ave
Memphis, TN 38104

Dear Dr. Groff:

Thank you for your friendly call last night!

I am very happy to give you full freedom to use my MARP charts in any way that you wish. I also enclose a disk which contains them in several formats. This is just in case you want to make any changes.

Sincerely

[Signature]